

## **FIFTH YEAR ANNUAL REPORT (FIVE-YEAR REVIEW REPORT)**

INTERSTATE POLLUTION CONTROL/ROTO-ROOTER SUPERFUND SITE  
Winnebago County  
Rockford, Illinois

Prepared for:

Interstate Pollution Control/Roto-Rooter Superfund Site Remedial Design/Remedial Action Steering Committee

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October 4, 2012

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## **1.0 INTRODUCTION**

This Fifth Year Annual Report (Five-Year Review Report) (“report”) was prepared by Environmental Information Logistics, LLC (EIL) on behalf of the Interstate Pollution Control/Roto-Rooter (“IPC”) Superfund Site Remedial Design/Remedial Action Steering Committee. This report discusses the results of long-term natural attenuation monitoring through the second quarter (June) 2012 sampling event, and satisfies the requirements of the IEPA-approved Groundwater Monitoring Work Plan (“GWMP”), dated March 1, 2006, the IEPA-approved First Year Annual Report/Technical Memorandum (“Tech Memo”), dated August 28, 2008, and the Consent Decree (with Appendix B – Statement of Work (SOW)) with the State of Illinois, dated March 1, 2006.

Section 6.0 of the IEPA-approved GWMP states the following:

*“Annual reports will be prepared and submitted to the IEPA within 45 days of completing each second semi-annual groundwater sampling event (except in years 1, 5, 10, 15, etc., as discussed above and below). Each of the annual reports will include a summary of groundwater data collected during the past year and will include an evaluation, based on the IEPA-approved statistical methodology, of the source of any statistically significant changes to groundwater quality. Where appropriate, the annual report may also recommend changes to the statistical methodology for future monitoring events.”*

Section 6.0 of the IEPA-approved GWMP also states the following:

*“Five-year review reports will be submitted to the IEPA within 45 days of completing the second semi-annual sampling event at the end of each five-year cycle. Each five-year review report will include a cumulative summary of the results of statistical analysis of that data, and an evaluation of the source of any statistically significant changes to groundwater quality.”*

This is the fifth annual report prepared since natural attenuation groundwater monitoring began at the site. Therefore, this report includes a cumulative summary of the results of statistical analysis, comparison of the results to calculated background groundwater quality standards, and an evaluation of the source of any statistically significant changes to groundwater quality, as required for the Five-Year Review Report. This report also includes an alternative source demonstration (ASD) to address the presence during this reporting period of two COCs in downgradient monitoring well MW4, and the presence in previous reporting periods of one COC in downgradient monitoring well MW1.

### **1.1 Site Description and Background**

#### ***1.1.1 Site Description***

The Interstate Pollution Control Inc. (IPC) site (“the site”) is located in an industrial area in the south central part of Rockford, Winnebago County, Illinois north west of Magnolia Peoples

Avenue, as shown on the figure included in Attachment 1. The small (approximately 2.8 acre), irregularly-shaped site measures approximately 850 feet long along the north boundary line and 270 feet along the east boundary line.

During IPC's operation of the site it contained, at various times, at least six underground storage tanks, one large above-ground storage tank, an unlined surface impoundment, a gas fired incinerator, and several structures. IPC's operation at the site included transporting and bulking of waste oils, solvents and cyanide waste for incineration, resale and/or off-site disposal. Also during IPC's operation of the site, support service was provided to two sister companies; a portable toilet business and a Roto-Rooter franchise. Prior to IPC's operations, the site was extensively quarried and backfilled with various materials including a large quantity of foundry sand. Following filling of the quarry and immediately prior to IPC's operations, the site was the location of an auto salvage yard.

In 1991, private parties negotiated a Partial Consent Decree with the Illinois EPA and the Attorney General of the State of Illinois. The Partial Consent Decree required that the private parties ("Respondents") undertake a Remedial Investigation/Feasibility Study ("RI/FS") at the site. The RI Work Plan was completed in 1992, and the field investigations were conducted in 1993-1994. The final RI Report was submitted in 1997.

Significant removal actions have occurred at the IPC site on two different occasions. The incinerator was removed between 1976 and 1979. IPC conducted partial cleanup of the site in 1979 and 1980, in response to an Illinois Pollution Control Board Order. During this partial cleanup of the site, several bulk tankers containing wastes, approximately 180 yds<sup>3</sup> of material from the surface impoundment, and approximately 120 yd<sup>3</sup> of cyanide-contaminated soils were removed. Reportedly, 1,200 drums of contaminated materials were also removed from the site during this cleanup. The surface impoundment was backfilled and graded.

On August 6, 1991, the U.S. EPA issued a Unilateral Administrative Order ("UAO") to IPC and the Respondents to conduct additional removal activities at the site. Beginning in 1992, the Respondents to the UAO fenced the site, removed over 1,400 tons of solid and hazardous waste (including visibly stained soils), demolished and removed all above-ground and underground tanks and significant structures, installed a clay cover over the former impoundments, and substantially cleared the site.

These removal actions eliminated more than 2.9 million pounds of solid and hazardous waste. These materials constituted principal threats at the site and were removed, treated, destroyed or disposed of prior to the initiation of the RI/FS.

### ***1.1.2 Constituents of Concern (COCs)***

A total of 73 chemicals of potential concern ("COPCs") were identified originally in the RI based on previous detections in site soils and were selected for risk assessment. These included 11 volatile organic compounds ("VOCs"), 29 semi-volatile organic compounds ("SVOCs"), 14 pesticide/PCB compounds, 18 trace metals, and cyanide. In addition, a total of 33 chemicals previously detected in on-site groundwater were selected as COPCs. These included 11 VOCs, 10 SVOCs, one pesticide/PCB compound, 11 trace metals, and cyanide. A significantly reduced

number of these COPCs were found to be risk drivers, as summarized in the “*Risk Driving Chemicals of Potential Concern*” table from Section V of the ROD.

Based on the previously discussed contaminant removal activities and the installation of the engineered barrier, and as stated in Section 2.4 of the SOW, “*VOCs are the sole constituents of concern*” with respect to long term natural attenuation groundwater monitoring at the site. Section 2.4 of the SOW specifies that “*...groundwater will be sampled for TCL VOC's only.*” during long term natural attenuation monitoring. In addition, paragraph XII of the Record of Decision (ROD) states “*If during each Five Year Review cycle spastically [sic] significant decreases in on-site and down gradient concentrations of trichloroethene and 1,1,1-trichloroethane in shallow groundwater are not verified (which cannot be attributed to upgradient sources), the SVE design pilot test will be implemented.*”

Seven VOCs were detected in site monitoring wells during the background data collection period and as reported in the August 28, 2008 First Year Annual Report/Technical Memorandum. These are:

- 1,1,1-trichloroethane
- 1,1-dichloroethane
- 1,1-dichloroethene
- cis-1,2-dichloroethene
- tetrachloroethene
- trichloroethane
- vinyl chloride

However, only four VOCs were proposed originally as site-specific COCs for long-term groundwater quality evaluation. Three VOCs, 1,1-dichloroethane, vinyl chloride, and cis-1,2-dichloroethene, were specifically not proposed as COCs because they were generally detected at elevated concentrations in downgradient monitoring wells and because there was, and continues to be, strong evidence to suggest that the downgradient concentrations were, and continue to be, biased due to an off-site source (i.e., landfill gas from the adjacent Peoples Avenue Landfill). However, IEPA’s approval of the August 28, 2008 First Year Annual Report/Technical Memorandum was conditional based on the inclusion of all seven VOCs as COCs. Therefore, all seven of the VOCs detected during background data collection and as listed above are evaluated herein as COCs.

### ***1.1.3 Extent of Groundwater Impacts***

Remedial investigation activities were conducted at the site to evaluate the nature and extent of contamination, and to assess environmental impacts. Detailed results are provided in the *Final Remedial Investigation Report, Interstate Pollution Control Inc. Site, Rockford, Illinois* (Golder Associates Inc., December 1997). In general, site groundwater was found to be impacted with numerous organic and inorganic constituents from a combination of past site activities and from a number of upgradient sources. Some of the upgradient sources are being addressed under various regulatory actions and it appears that some are not. In addition, landfill gas from the adjacent Peoples Avenue Landfill was detected on-site and identified as another possible source of VOCs in groundwater.

The site is located adjacent to the much larger Southeast Rockford Groundwater Contamination (“SER”) site. The SER site began with the discovery of VOCs in groundwater within a residential area of nearly two square miles. The discovery prompted the USEPA to ultimately extend water mains and connect 526 residences to City water at a cost of approximately \$4 million. The SER site was then added to the National Priorities List (“NPL”). After further IEPA study, the SER site was expanded to a ten square mile study area (“SER Study Area”) that incorporates almost 20 percent of the City and includes the IPC site. Studies have since indicated the widespread presence of chlorinated solvents in groundwater within this ten square mile area, in concentrations varying from less than 10 ppb to over 10,000 ppb.

The SER ROD defines the boundary of the SER Site by the 10 ppb chlorinated VOC plume that extended to approximately 1,200 feet southeast of the IPC site at its closest point (as of 1993). It is reasonable to expect that parts of this plume have expanded to the extent that it now affects groundwater beneath the IPC site.

As discussed in the 1999 site ROD, there are/were also a number of other known groundwater contaminant sources located near the IPC site. For example, the former Mattison Machine Works is located approximately 1,000 feet to the northeast (i.e., upgradient). Previous studies at Mattison Machine Works dating back to 1993 indicate that a plume containing PCE (up to 10,600 ug/L), TCE (up to 1,500 ug/L), and 1,1,1-TCA (up to 800 ug/L) is/was passing under that facility. These concentrations are much higher than are in groundwater at IPC. In addition, the Peoples Avenue Landfill, located immediately southeast of IPC, was previously identified as the likely source of groundwater contamination that contributed to the deterioration of groundwater quality in one of the City of Rockford’s public supply wells (Municipal Well No. 14), ultimately resulting in the abandonment of the supply well in 1971, prior to operations at IPC. The Peoples Avenue Landfill is also a known source of landfill gas (including methane) migration that previously entered the basement of the former Quaker Oats pet food manufacturing plant, located just southwest of the IPC site. And, as reported previously, there is evidence to suggest that landfill gas has impacted site monitoring well MW-4.

While remedial actions associated with some of the known sources within the SER Study Area are presently on-going, the IEPA and U.S. EPA have not specifically addressed some of the known groundwater contamination sources near to and upgradient of the IPC site. As indicated in the RI report and in the ROD, some of these sources contain elevated concentrations of VOCs, some of which are/were higher than those measured on-site.

As noted in the ROD,

*“One of the most notable outcomes of the groundwater portion of the [RI] investigation was verification that a plume of chlorinated volatile organic compounds, at substantially higher concentrations than occur on site is approaching the site from the north east. The plume is expected to reach the IPC site in 15 to 45 years.”*

This is significant because, given that the RI data collection activities were completed by 1994, the “plume” would have possibly reached the site as early as 2009, resulting in degradation of site groundwater quality that is completely unrelated to the performance of the selected remedy

and which could be attributed mistakenly to the site. As such, the interpretation of the results of long term natural attenuation monitoring must take into account the potential for groundwater quality degradation due to off-site sources. This approach reduces the possibility of incorrectly concluding that the selected remedy is insufficient and that the remedy must be supplemented with soil vapor extraction.

In fact, and as discussed in the First Year Annual Report/Technical Memorandum and the Second Year Annual Report, an upgradient plume appears to have arrived at the site. While the source of the plume is unknown, it is likely that it is the same one previously reported under the Mattison Machine Works property, and it is possible that the SER Site plume has also expanded to the extent that it now affects groundwater quality at the IPC site. Regardless of the source, it is reasonable to expect that the plume will continue to migrate through the site until such time that the upgradient sources are either removed or isolated, eventually affecting the three downgradient site monitoring wells, and ultimately the two river wells. As such, there will likely be further groundwater quality degradation in the site monitoring wells and possible new groundwater quality degradation in the river wells that is completely unrelated to the site and to the performance of the selected remedy.

Therefore, the statistical analysis plan was developed such that it allowed for recalculation of background standards (as appropriate) and/or adjustment of the evaluation protocol in order to reduce the likelihood of false positive statistical failure related to the off-site sources. Since there is evidence to suggest that the upgradient plume has arrived, and in accordance with the IEPA-approved GWMP and the IEPA-approved First Year Annual Report/Technical Memorandum, revised calculated background standards and statistical evaluation criteria were included in the Second Year Annual Report for selected COCs. This report, therefore, includes statistical evaluations that are consistent with those originally provided in the IEPA-approved GWMP and First Year Annual Report/Technical Memorandum and as modified by the Second Year Annual Report.

#### ***1.1.4 Remediation***

The IEPA selected the remedial alternative with the concurrence of the U.S. EPA and after a detailed analysis of the alternatives included in the approved Feasibility Study (FS). The selected remedial alternative addresses the principal threats by installation of an impermeable barrier over the site, placing institutional controls on future site uses, reinforcing existing city and state groundwater use restrictions, and addressing groundwater contamination resulting from the site by implementing a monitored natural attenuation program. The selected remedy also includes a soil vapor extraction component as a contingency should the IEPA conclude during the five-year review periods that site and downgradient groundwater quality has not improved due to continued site releases which cannot be attributed to upgradient sources. However, the selected remedy does not take into consideration the potential affect of the numerous, known off-site impacts which now appear to be impacting site groundwater quality.

An SVE system was not included as an active part of the current remedy for a number of reasons, as discussed in the FS. First, the incremental improvement in reducing VOC migration to groundwater, and therefore in reducing risk to health and the environment, was deemed minimal following the construction of the surface barrier. Second, the treatment efficiency for

an SVE system was not quantifiable given the relatively high VOC load currently on site and the on-going impacts from off-site sources. Finally, there were concerns that an SVE system would induce landfill gas migration from the Peoples Avenue Landfill that would adversely impact the operation of such a system. There were also concerns, discussed with the IEPA during the FS evaluation process, that such landfill gas migration would create a site health and safety issue related to possible explosive hazards.

Nothing has changed at the site that would alter the first criterion, above. The engineered barrier was installed and is being maintained, effectively eliminating both surface water infiltration and potential exposure to any remaining site contaminants. However, the predicted arrival of the uncontrolled upgradient plume(s) is (are) degrading, and will likely continue to degrade, for an unknown period of time, groundwater quality beneath the engineered barrier. Groundwater quality degradation from the upgradient plume(s) can be expected to continue until the upgradient source(s) are either removed or are isolated, and there is presently no indication that there are either ongoing or planned efforts to address the uncontrolled sources. This has resulted in a situation in which the IPC Steering Committee's ability to incrementally evaluate IPC's contribution to groundwater degradation is now extremely difficult, if not impossible.

Regarding the second criterion, if there was formerly an inability to quantify the efficacy of an SVE system given the then-current contaminant loads, then the arrival of the off-site plume(s), which could effectively increase on-site contaminant load, would further reduce the ability to quantify the efficacy of an SVE system. For example, if an SVE system were installed and operated concurrent with the arrival of the upgradient plume, then it would be likely that the degrading effect of the plume would far outweigh the remedial effect of the SVE system.

Regarding the third criterion, the potential for an SVE system to induce off-site landfill gas migration appears to be quite real given the recent documentation showing that groundwater in MW4, located adjacent to the People's Avenue Landfill, already contains dissolved methane which is likely the result of landfill gas migration on to the site. It is reasonable to expect that if landfill gas can migrate to the site under current, passive conditions (i.e., with no SVE system), then there is a greatly increased likelihood of additional landfill gas migration under active conditions (i.e., with an active SVE system) with a corresponding potential increase in groundwater quality degradation and health and safety related issues associated with landfill gas explosive hazards.

Finally, it must be emphasized that the SVE system would be designed to reduce contaminant load in site soils and thus reduce the potential for contaminant migration from site soil to site groundwater, premised on the assumption that current groundwater impacts are generally a function of the current soil contaminant load. Given that the upgradient groundwater plume(s), which appears to have already reached the site, contains higher concentrations of some COCs than are currently in site groundwater, it is fair to expect that the upgradient source will be significantly larger and/or more heavily contaminated than what presently remains in site soil. Under these conditions the incremental improvement to site groundwater quality via the implementation of an SVE system will be immeasurable or nonexistent.

On the basis of these arguments, the IPC Steering Committee recommended previously (*River Well Statistics Technical Memorandum, June 1, 2010*), and continues to recommend, that the SVE system be excluded from further consideration as a contingent remedy.

The engineered barrier was completed in 2006. The groundwater monitoring natural attenuation program began in September 2007 and background data collection at the six site monitoring wells was completed in June 2008. The slight delay between the completion of the engineered barrier and the initiation of natural attenuation monitoring was based on the desire to complete the installation of the two river wells and to collect background data from them simultaneously with the six site monitoring wells. Unfortunately, the installation of the two river wells was delayed more than expected due to access issues beyond the control of the steering committee. Therefore, after a period of time the IEPA requested that background data collection begin at the six site wells even though the two river wells had not been installed.

The two river wells were installed in March 2009 and background data collection was completed following the fourth quarter 2009 sampling event. The results of the river well background data collection and the calculated COC standards were provided to the IEPA on June 1, 2010. This report includes data collected through June 2012 (i.e., the eighth semiannual event at the site wells and the fifth semiannual event at the river wells).

## **1.2 Statistical Analysis Plan**

The statistical evaluation plan (STEP) was included in the IEPA-approved First Year Annual Report/Technical Memorandum and was specifically designed to allow for subsequent modification to account for the anticipated influences from off-site contaminant sources and to reduce the possibility that those influences could result in statistical failures. Due the apparent arrival of the off-site plume and the continued landfill-gas influences in MW4, the STEP was modified in the Second Year Annual Report as follows:

- Intrawell background standards were recalculated for 1,1-DCA in MW3 and for PCE and TCE in MW6 to account for the arrival of the off-site (upgradient) contaminant plume.
- Interwell background standards were recalculated for 1,1-DCA, PCE, and TCE in the three upgradient wells to account for the arrival of the off-site (upgradient) contaminant plume.
- A statistical failure at MW4 would hereafter be based on a combined failure of an interwell *and* an intrawell background standard to reduce the possibility of a statistical failure due to landfill gas influences from the Peoples Avenue Landfill.

The evaluations included in this Fifth Year Annual Report (Five-Year Review Report) are based on the modified STEP.

### **1.3 Fifth Year Annual Report (Five-Year Review Report) Overview**

The purpose of this report is to provide the results of long-term natural attenuation monitoring to date at the site, a comparison of the data to previously calculated background groundwater quality standards, and an evaluation of whether the site is currently impacting groundwater. Given that this annual report is the first “Five-Year Review” report, it also includes an evaluation of the source of any statistically significant changes to groundwater quality. This report is organized as follows:

- Section 2.0 provides on evaluation of groundwater quality based on a comparison of COC detections with calculated COC background standards.
- Section 3.0 includes an alternative source demonstration (ASD) for various COCs detected currently or previously in monitoring wells MW1 and MW4 and, in general, any other statistically significant changes to groundwater quality, if any.
- Section 4.0 includes a summary and conclusions.

## **2.0 EVALUATION OF SITE GROUNDWATER QUALITY**

Background groundwater quality data collection was performed at the six site monitoring wells in accordance with the ROD, SOW, and IEPA-approved GWMP. A site-specific list of seven COCs was selected and background standards were calculated based on the first four quarters of background data collection. The COC list and calculated background standards were approved by IEPA. As discussed in detail in the Second Year Annual Report and summarized herein, selected background standards were recalculated in the upgradient wells to incorporate upgradient plume-affected data, and minor modifications were made to the statistical evaluation protocol, to reduce the possibility of future statistical failures based on influences from the upgradient plume.

Background data collection was completed in the two river wells following the fourth quarter 2009 sampling event. Specific COC background standards were calculated for both river wells and were submitted to IEPA on June 1, 2010 (*River Well Statistics Technical Memorandum*) and are the basis for the statistical comparisons included herein.

### **2.1 Site Groundwater Monitoring Network**

The site groundwater monitoring network consists of six monitoring wells, designated MW1, MW2, MW3, MW4, MW5, and MW6. The locations of these wells are shown on the figure included in Attachment 2. Each well is screened at a depth of approximately 60 feet within the shallow sand and gravel aquifer. Both regional and local groundwater flow in this aquifer is generally from northeast to southwest, towards the Rock River. Based on this groundwater flow direction, monitoring wells MW3, MW5, and MW6 are hydraulically upgradient of the site. The remaining three monitoring wells, MW1, MW2, and MW4 are hydraulically downgradient of the site.

### **2.2 River Wells**

Two river wells were installed in March 2009, as required, at the locations shown on the figure included in Attachment 2. The river wells are designated MW8 and MW9, and both were installed to a depth of approximately 19 feet. (Note: The designation MW7 is reserved for the “blind” duplicate sample submitted to the laboratory during each monitoring event). Based on current groundwater flow conditions, both river wells are hydraulically downgradient of the site.

### **2.3 Results of Ongoing Natural Attenuation Groundwater Monitoring**

Semiannual groundwater sampling for each of the seven COCs was performed in each of the site monitoring wells during this reporting period. Quarterly monitoring was performed at the two river wells through the background data collection period (ending in the fourth quarter 2009) and then continued on a semiannual basis. The laboratory data reports are included as Attachment 3. A summary of the analytical results for each COC in each monitoring well is included in the table in Attachment 4. The table in Attachment 4 also includes the calculated background standards. Concentration time trends for each COC in each well are included as Attachment 5.

Each laboratory data report was reviewed for completeness and accuracy, in accordance with the IEPA-approved quality assurance project plan (QAPP). The reviews included laboratory QA/QC documentation and the results of field and quality control blanks. Data validation summaries for each laboratory sampling report are included in Attachment 6.

Please note that confirmation resampling was performed at selected wells following the December 2011 sampling event. The purpose of the resampling was to evaluate the reported concentration of 1,1-dichloroethane in monitoring well MW-8 and also to address quality assurance issue involving a possible sampling labeling error. This is discussed in more detail in section 2.3.4.

A discussion of site groundwater quality is included below.

### **2.3.1 Upgradient Site Groundwater Quality**

Overall upgradient groundwater quality appears to have improved with respect to total VOC load, both during the past year and since natural attenuation monitoring began in 2007. However, the concentrations of tetrachloroethene (PCE) appear to have increased in both upgradient wells MW3 and MW6 as has the concentration of trichloroethene (TCE) in well MW6. Similar to last year, the concentration of PCE in MW3 exceeded its calculated intrawell standard during the most recent sampling event. The concentration of PCE in MW3 also exceeded the calculated interwell standard during the December 2011 sampling event. This is consistent with the apparent arrival of the off-site, upgradient VOC plume, as reported previously. As stated in the ROD,

*“One of the most notable outcomes of the groundwater portion of the [RI] investigation was verification that a plume of chlorinated volatile organic compounds, at substantially higher concentrations than occur on site is approaching the site from the north east. The plume is expected to reach the IPC site in 15 to 45 years.”*

Given that the RI data collection activities were completed by 1994, arrival of the plume by 2009 is entirely consistent with the predictions included in the RI Report. This appears to be further supported by the total (i.e., cumulative) VOC load trends included as Attachment 7. As shown in the total VOC load time trends, the total (i.e., cumulative) VOC load has always been higher in the three upgradient wells compared to the three downgradient wells since natural attenuation monitoring began in 2007. Clearly, therefore, upgradient groundwater quality is worse than is downgradient groundwater quality based on total VOC load.

The IEPA requested in their August 26, 2009 Second Year Annual Report comment letter that a graph showing the sum of trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) in the upgradient site wells compared with the sum in the downgradient site wells be included in the annual reports. Such a time trend is included in Attachment 8. As shown on the graph, the total concentrations of these two compounds have been consistently higher in the upgradient wells. The sum of TCE and 1,1,1-TCA in the upgradient wells peaked in December 2009 and has since decreased to the lowest concentrations since natural attenuation monitoring began in 2007. During the same time period, the sum of TCE and 1,1,1-TCA in the downgradient wells has also decreased from 324 ug/L to 185 ug/L, a decrease of nearly 43 percent. It is also relevant to note

that the sum of TCE and 1,1,1-TCA in the downgradient wells has decreased for five consecutive semi-annual monitoring events. And finally, the difference between the cumulative upgradient sums and the cumulative downgradient sums has increased from approximately 206 ug/L when natural attenuation monitoring began to 230 ug/L. Based on this comparison alone, there is evidence that groundwater quality has improved downgradient of the site compared to upgradient of the site.

Strictly speaking and consistent with the IEPA-approved statistical analysis plan, an intrawell exceedance in an upgradient well is evidence of groundwater degradation due to an off-site source and is, therefore, grounds for recalculating the intrawell background standard. However, given that there is presently only one upgradient intrawell exceedance and the relatively stable total VOC load, we do not think that any further upgradient intrawell background standard revisions are appropriate at this time.

Also, the interwell exceedance of TCE in MW6 during the December 2011 monitoring event provides statistical evidence that the original background data set used to calculate the interwell standards may no longer be representative due to the arrival of the off-site plume. In other words, the current background data set, at least for TCE, may not properly account for temporal variability (i.e., as it is specifically affected by the arrival of the off-site plume). However, given that there was only a single interwell exceedance, we do not currently propose the recalculation of any of the upgradient interwell background standards. This could change if there are additional interwell exceedances in any of the upgradient monitoring wells during future monitoring events.

### ***2.3.2 Downgradient Site Groundwater Quality***

Downgradient groundwater quality in the three site wells continues to improve. Total VOC load in the downgradient wells, depicted in the time trends included as Attachment 7, has decreased fairly steadily and is presently about 652 ug/L compared to 990 ug/L when natural attenuation monitoring began, a decrease of about 34 percent.

There were two interwell exceedances in MW4; one for 1,1-DCA and one for vinyl chloride, consistent with that reported in previous years. However, neither concentration exceeded its respective intrawell background standard and, therefore, does not represent a statistical failure. The presence of both these compounds at relatively high concentrations (compared to the other site monitoring wells) was reported previously in the First Year Annual Report/Technical Memorandum and was attributed to landfill gas from a known off-site/side gradient and uncontained source, the Peoples Avenue Landfill. This was the primary motivation behind our initial request to exclude these two compounds from long-term natural attenuation monitoring, which was denied by IEPA.

The concentration of 1,1-DCA in well MW1, which has previously exceeded its calculated interwell standard, was below the interwell standard during the reporting period.

This report includes an alternative source demonstration (ASD) for the above exceedances in Section 3.0.

### **2.3.3 Downgradient River Well Groundwater Quality**

There were no VOCs detected in river well MW9, consistent with that reported last year.

Three VOCs, 1,1-DCA, trichloroethene, and cis 1,2-DCE, were detected in MW8 during this reporting period. However, the concentrations were generally much less than in most of the site wells, and more than an order of magnitude less than in half the site wells. Therefore, there is no indication of site-related groundwater impacts in the river wells.

Please note that the concentration of 1,1-DCA slightly exceeded its calculated interwell background standard during the December 2011 sampling event. However, confirmation resampling was performed at the resulting concentration was less than the calculated interwell background standard. Therefore, there was no statistical failure.

### **2.3.4 Quality Assurance/Quality Control Issues**

We identified a likely quality assurance/quality control issue after reviewing the laboratory data from the December 2011 sampling event. During each sampling event, a duplicate sample is collected from one of the impacted wells, in this particular case from downgradient site monitoring well MW-1. The duplicate sample is always designated "MW-7".

Based on the comparison between the analytical results from duplicate sample MW-7, MW-1, and MW-9, it appeared that some sort of reporting error had occurred because the results varied significantly and unexpectedly from historical results. The results from the duplicate sample, in this case "MW-7", should have been very similar to the results from MW-1 since the duplicate sample was collected from MW-1. However, as shown below, this was not the case. Not only were the results from MW-7 mostly non-detect (quite different from MW-1), but the results from river well MW-9 contained numerous VOCs that had never been detected before. Furthermore, the results from MW-9 looked very similar to the results from MW-1. Therefore, we suspected that the results from duplicate sample MW-7 had been inadvertently switched with the results from MW-9, either due to a field labeling error or a laboratory reporting error.

Results of December 2011 Sampling Event

Compound	MW-1	MW-7	MW-9
1,1,1-TCA	5.2	5 U	5 U
1,1-DCA	12	5 U	11
1,1-DCE	13	5 U	12
cis-1,2-DCE	140	6.5	120
PCE	5 U	5 U	5U
TCE	21	5 U	20
Vinyl chloride	15	2 U	14

Based on the apparent labeling/reporting error, confirmation resampling was performed at monitoring well MW-9. The results of the confirmation resampling were consistent with historical results and confirmed our suspicions about the labeling/reporting error.

### **3.0 ALTERNATIVE SOURCE DEMONSTRATION FOR COCS DETECTED IN SITE MONITORING WELLS MW1 AND MW4**

Groundwater samples collected during the quarterly background monitoring were also analyzed for dissolved methane, specifically during the third quarter 2008 monitoring event, as reported previously in the First Year Annual Report/Technical Memorandum. Dissolved methane, a major component of landfill gas, was detected in five of the six site monitoring wells as summarized in the table below.

Results of Dissolved Methane Analyses

Sample Location	Concentration of Dissolved Methane (ug/L)	Reporting Limit (ug/L)
MW1	2.1	0.19
MW2	2.1	0.19
MW3	4.1	0.19
MW4	42	0.19
MW5	ND	0.19
MW6	1.2	0.19
MW7*	1.3	0.19
Field blank	ND	0.19
Trip blank	ND	0.19

ND = not detected at the reporting limit

\* “blind” duplicate sample collected from MW6

#### **3.1 Sources of Naturally Occurring Dissolved Methane**

The relatively low dissolved methane concentrations in four of the wells may be indicative of methanogenesis, a naturally occurring form of anaerobic respiration associated with certain common microbes in the presence of organic material. Subsurface soil at the site was reported in the RI report to have contained relatively high concentrations of total organic carbon (TOC). Given that the recently constructed site cap has likely created subsurface anaerobic conditions, the presence of an abundant “food” source (i.e., the high TOC), it is not unreasonable to assume that methanogenesis is occurring. Therefore, the site-wide presence of relatively low concentrations of dissolved methane could indicate that natural attenuation is active.

#### **3.2 Off-Site Sources of Dissolved Methane**

The Peoples Avenue Landfill is located adjacent to and south/southeast of the site, and reportedly received a combination of residential, commercial, and industrial wastes. The combustible gas methane was previously detected in the basement of the adjacent pet food plant, and it was attributed to the Peoples Avenue Landfill (USEPA, 1976; RI Report, 1994). Two isolated areas with elevated combustible gas readings (i.e., methane) were also identified between the site and the Peoples Avenue Landfill during RI activities conducted in the early

1990's. Soil gas collected from these areas also contained slightly elevated concentrations of VOCs. The conclusion contained in the RI was:

*"The USEPA and RI soil gas results indicate, therefore, that the Peoples Avenue Landfill may be an active source of combustible gases and, possibly, organic vapors in the Site area."*

Landfill gas migration is a commonly known transport mechanism for numerous VOCs including tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, vinyl chloride, and others (Vogel et al., 1987). As such, landfill gas migration has been implicated to be a principal source of many VOCs, including those currently detected in site groundwater, in groundwater near landfills.

While dissolved methane was discovered in most of the site monitoring wells, the concentrations were relatively low and, therefore, are likely at least partially the result of on-site methanogenesis.

#### *MW4*

The concentrations of 1,1-DCA and vinyl chloride continue to exceed their respective interwell background standards in MW4 during this reporting period, consistent with most of the historical sampling events. However, the concentrations do not exceed their respective introwell background standards. As such, the concentrations do not constitute a statistical failure and, strictly speaking, are not subject to an Alternative Source Demonstration. However, the following information is provided for informational purposes.

Given that MW4 is located adjacent to the Peoples Avenue Landfill and it contains, by far, the highest concentration of dissolved methane compared to the other wells, it is highly likely that landfill gas from the Peoples Avenue Landfill is the source for much or all of the dissolved methane in MW4. This is consistent with the previous reports documented herein. And given that landfill gas is a common carrier of numerous VOCs, including 1,1-DCA and vinyl chloride, it is fair to conclude that the elevated concentrations of 1,1-DCA and vinyl chloride in MW4 are also the result of the presence of landfill gas.

It is important to note that neither 1,1-DCA nor vinyl chloride are exhibiting increasing trends in MW4, and concentrations are well within the range of those detected since the beginning of natural attenuation monitoring. More importantly, the total VOC load in MW4 has continued to decrease from a high of 389 ug/L in December 2007 to its lowest point of approximately 158 ug/L during the most recent sampling event, a drop of over 59 percent. In summary, therefore, there is no indication that groundwater conditions on MW4 are deteriorating due to the site and, in fact, it appears that overall groundwater conditions have improved.

#### *MW1*

There were no statistical failures at MW-1 during this reporting period. While there have been some interwell background standard exceedances for 1,1-DCA and vinyl chloride since natural attenuation monitoring began in December 2007, there have been no exceedances of the corresponding introwell background standards. Total VOC load in MW1 has decreased from a

high of approximately 336 ug/L in June 2008 to approximately 228 ug/L during the most recent sampling event, a decrease of over 32 percent.

It is possible that landfill gas has also affected groundwater conditions in this well and have thus biased the concentration of 1,1-DCA and vinyl chloride, as indicated by the presence of dissolved methane in groundwater at this well. Other known (or unknown) upgradient sources may also be contributing sources. While MW1 is technically a downgradient well, it is located such that it could easily be considered sidegradient. Based on the location of MW1, it is easy to see that a plume migrating from the northeast or from the adjacent quarry could, potentially, impact MW1 while not affecting the upgradient wells.

In any case, overall groundwater conditions have clearly improved in MW1 with respect to total VOC load and there is no indication of site-related degradation in groundwater quality at this well.

#### **4.0 SUMMARY AND CONCLUSIONS**

The results of long-term natural attenuation monitoring to date indicate that total (i.e., cumulative) VOC load in the downgradient wells has decreased during this reporting period to its lowest concentration since natural attenuation monitoring began in 2007. Similarly, the cumulative concentrations of TCE and 1,1,1-TCA have also decreased in the downgradient monitoring wells during this reporting period to their lowest concentrations. There does not appear to be any site-related groundwater degradation in either the site monitoring wells or in the river wells. The affects from the arrival of the upgradient plume appear to have generally stabilized for the moment, and the revised statistical standards and evaluation protocol appear to have satisfactorily addressed the impacts associated with the off-site plume and no further statistical evaluation revisions are currently recommended. However, it is reasonable to assume that the off-site plume will eventually migrate through the site and impact the downgradient monitoring wells, possibly resulting in new "false-positive" statistical failures that will need to be addressed either by revising calculated background standards or by changing the statistical evaluation protocol (or both).

While on-site methanogenesis is likely occurring, indicating that natural attenuation is active, the relatively high (i.e., anomalous) concentrations of dissolved methane in downgradient well MW4 appear to be the result of landfill gas migration from the Peoples Avenue Landfill. It is likely that the associated relatively high concentrations of 1,1-DCA and vinyl chloride in MW4 are the result of the presence of landfill gas and are not site-related. It is also likely that the presence of these compounds in other site wells are biased high due to the presence of landfill gas.

We look forward to the IEPA's approval of this report. If you have any questions, please do not hesitate to call me at 630 834-8847.

Sincerely,  
ENVIRONMENTAL INFORMATION LOGISTICS, LLC



A. Michael Hirt, P.G.  
Senior Geologist

#### **References**

Golder Associates, Inc., 1994, Final Remedial Investigation Report, Interstate Pollution Control Inc. Site, Rockford, Illinois.

USEPA, 1976, *Leachate Damage Assessment: Case Study of the Peoples Avenue Landfill Solid Waste Disposal Site in Rockford, Illinois*, EPA/530/SW-517.

Vogel et al., 1987, *Transformation of Halogenated Aliphatic Compounds*, Environmental Science Technology, vol. 21, pp. 722-736.

**Attachment 1**

**Site Location and Detail Maps**

**Attachment 2**

**Figure Showing the Locations of the Long-Term Natural Attenuation Monitoring Wells**

**Attachment 3**

**Laboratory Data Reports**

**Attachment 4**

**Data Summary Table**

**Attachment 5**

**COC Concentration Time Trends**

**Attachment 6**

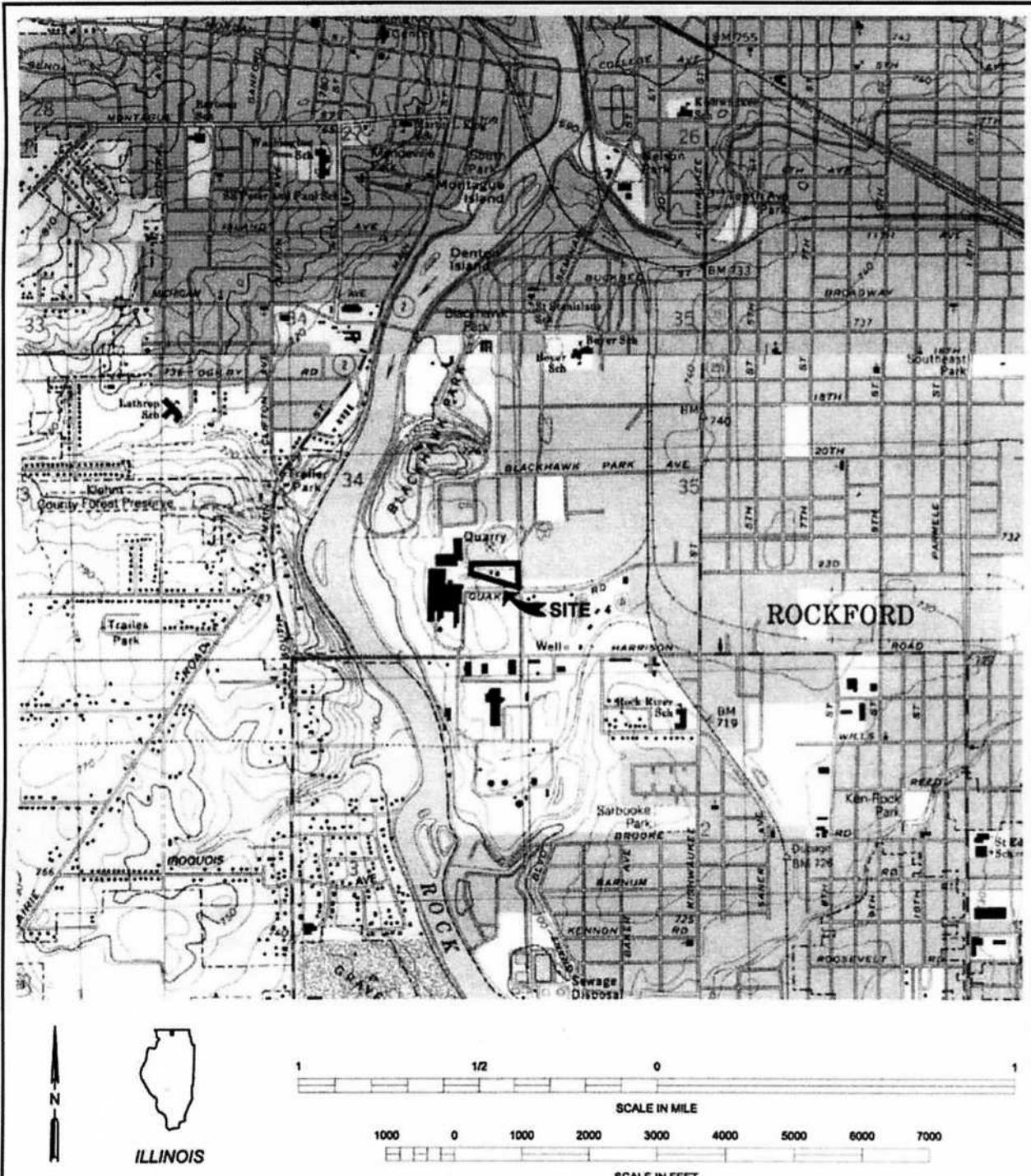
**Data Validation Summaries**

**Attachment 7**

**Total VOC Load Concentration Time Trends**

**Attachment 8**

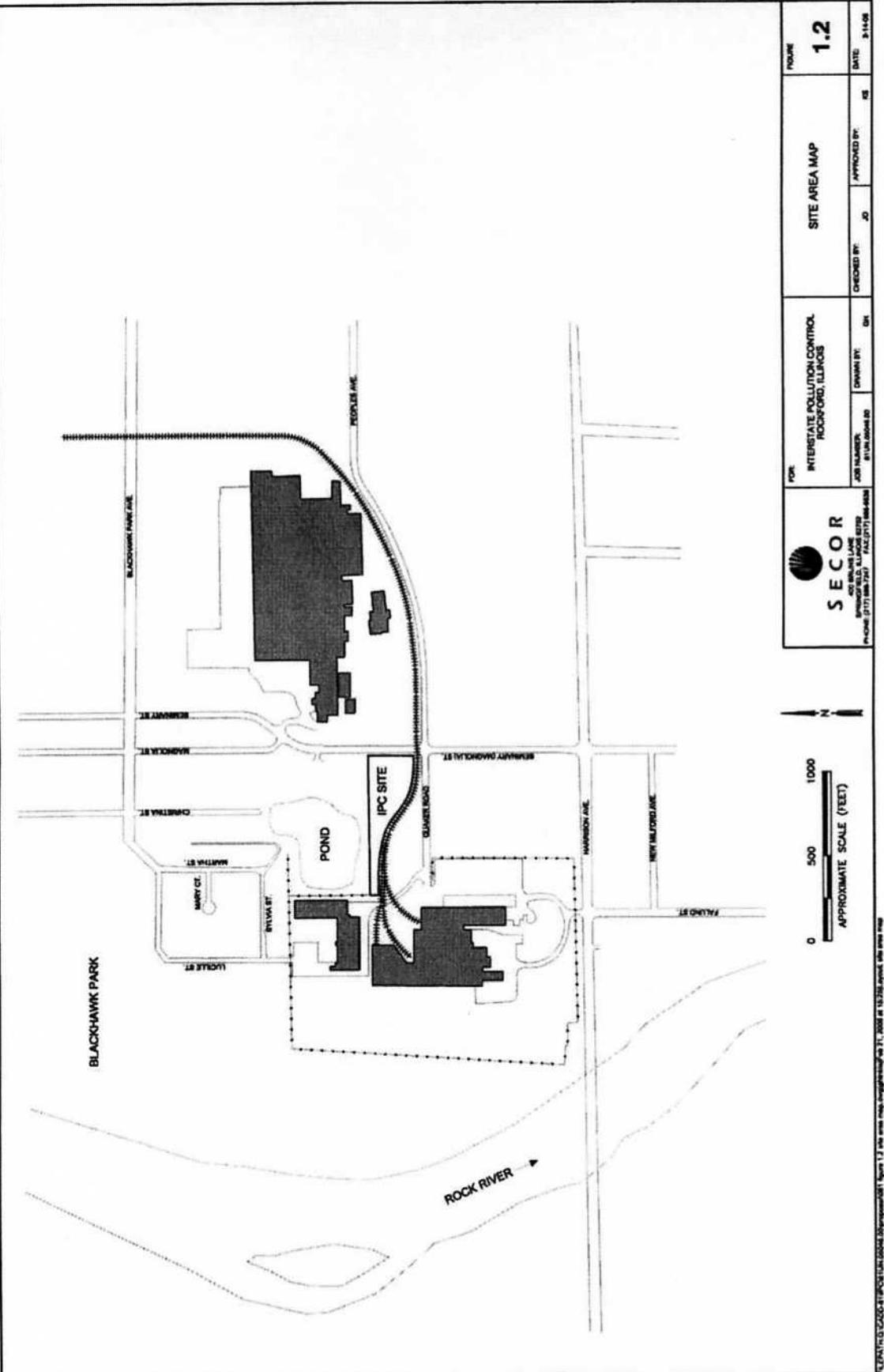
**Total VOC Load Trends (1,1,1-TCA plus TCE only)**



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; Rockford, IL North & South  
Photorevised 1993

 <b>SECOR</b> 400 BRUNS LANE SPRINGFIELD, ILLINOIS 62702 PHONE: (217) 598-7247 FAX: (217) 598-8538	FOR:  INTERSTATE POLLUTION CONTROL ROCKFORD, ILLINOIS				FIGURE  <b>1.1</b>
	JOB NUMBER: 61UN.05048.00	DRAWN BY: GH	CHECKED BY: JO	APPROVED BY: KS	

FILEPATH:Q:\CADD\61VPC\61UN.05048.00\proposal\061 figure 1.1 site location map.dwg[ghinkel]Feb 21, 2006 at 15:26\Layout\site loca



PERMIT TO DISCHARGE TO PUBLIC SOURCE APPROVED BY: SECOR CORPORATION, 8/10/00, ID: 1.2

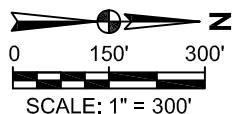


## LEGEND

- - - - - IPC APPROXIMATE SITE BOUNDARY
- ■ ■ ■ ■ LONG-TERM NATURAL ATTENUATION MONITORING WELL LOCATIONS

## NOTES

1. AERIAL PHOTO PROVIDED BY WINNEBAGO COUNTY GEOGRAPHIC INFORMATION SYSTEM (WINGIS).



SCALE: 1" = 300'

PREPARED BY



PREPARED FOR

INTERSTATE  
POLLUTION  
CONTROL

070309

**FIGURE 1**  
**LONG-TERM NATURAL ATTENUATION**  
**MONITORING WELL LOCATIONS**  
INTERSTATE POLLUTION CONTROL  
ROCKFORD, ILLINOIS

JULY 2009

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-43406-1

Client Project/Site: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)

975 Burton Street

Unit 10

Beloit, Wisconsin 53511

Attn: Ms. Mary Pearson



Authorized for release by:

12/30/2011 10:18:09 AM

Richard Wright

Project Manager II

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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The  
Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

### Job ID: 500-43406-1

Laboratory: TestAmerica Chicago

#### Narrative

Job Narrative  
500-43406-1

#### Comments

No additional comments.

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

No analytical or quality issues were noted.

## Detection Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

### Client Sample ID: MW8

### Lab Sample ID: 500-43406-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	6.5		5.0	0.29	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	16		5.0	0.24	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	46		5.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	58		5.0	0.18	ug/L	1		8260B	Total/NA
Tetrachloroethene	6.6		5.0	0.22	ug/L	1		8260B	Total/NA

### Client Sample ID: MW9

### Lab Sample ID: 500-43406-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	14		2.0	0.13	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	12		5.0	0.29	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	11		5.0	0.24	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	120		5.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	20		5.0	0.18	ug/L	1		8260B	Total/NA

### Client Sample ID: MW7

### Lab Sample ID: 500-43406-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.5		5.0	0.22	ug/L	1		8260B	Total/NA

### Client Sample ID: MW6

### Lab Sample ID: 500-43406-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	11		2.0	0.13	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	14		5.0	0.29	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	7.0		5.0	0.24	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	77		5.0	0.22	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	17		5.0	0.26	ug/L	1		8260B	Total/NA
Trichloroethene	94		5.0	0.18	ug/L	1		8260B	Total/NA
Tetrachloroethene	27		5.0	0.22	ug/L	1		8260B	Total/NA

### Client Sample ID: MW5

### Lab Sample ID: 500-43406-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	18		5.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	71		5.0	0.22	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	18		5.0	0.26	ug/L	1		8260B	Total/NA
Trichloroethene	150		5.0	0.18	ug/L	1		8260B	Total/NA
Tetrachloroethene	45		5.0	0.22	ug/L	1		8260B	Total/NA

### Client Sample ID: MW4

### Lab Sample ID: 500-43406-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	33		2.0	0.13	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	6.2		5.0	0.29	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	7.9		5.0	0.24	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	78		5.0	0.22	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	11		5.0	0.26	ug/L	1		8260B	Total/NA

### Client Sample ID: MW3

### Lab Sample ID: 500-43406-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		5.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	46		5.0	0.22	ug/L	1		8260B	Total/NA

## Detection Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

### Client Sample ID: MW3 (Continued)

### Lab Sample ID: 500-43406-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	18		5.0	0.26	ug/L	1		8260B	Total/NA
Trichloroethene	230		50	1.8	ug/L	10		8260B	Total/NA
Tetrachloroethene	54		5.0	0.22	ug/L	1		8260B	Total/NA

### Client Sample ID: MW2

### Lab Sample ID: 500-43406-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.8		2.0	0.13	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	15		5.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	53		5.0	0.22	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	14		5.0	0.26	ug/L	1		8260B	Total/NA
Trichloroethene	140		5.0	0.18	ug/L	1		8260B	Total/NA
Tetrachloroethene	34		5.0	0.22	ug/L	1		8260B	Total/NA

### Client Sample ID: MW1

### Lab Sample ID: 500-43406-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	15		2.0	0.13	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	13		5.0	0.29	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	12		5.0	0.24	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	140		5.0	0.22	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	5.2		5.0	0.26	ug/L	1		8260B	Total/NA
Trichloroethene	21		5.0	0.18	ug/L	1		8260B	Total/NA

### Client Sample ID: FB

### Lab Sample ID: 500-43406-10

No Detections

### Client Sample ID: Trip Blank

### Lab Sample ID: 500-43406-11

No Detections

## Method Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-43406-1	MW8	Water	12/20/11 09:27	12/21/11 11:40
500-43406-2	MW9	Water	12/20/11 09:40	12/21/11 11:40
500-43406-3	MW7	Water	12/20/11 10:45	12/21/11 11:40
500-43406-4	MW6	Water	12/20/11 11:19	12/21/11 11:40
500-43406-5	MW5	Water	12/20/11 12:00	12/21/11 11:40
500-43406-6	MW4	Water	12/20/11 13:03	12/21/11 11:40
500-43406-7	MW3	Water	12/20/11 13:31	12/21/11 11:40
500-43406-8	MW2	Water	12/20/11 14:02	12/21/11 11:40
500-43406-9	MW1	Water	12/20/11 14:29	12/21/11 11:40
500-43406-10	FB	Water	12/20/11 14:45	12/21/11 11:40
500-43406-11	Trip Blank	Water	12/20/11 00:00	12/21/11 11:40

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW8**

Date Collected: 12/20/11 09:27

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/28/11 18:48	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/28/11 18:48	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/28/11 18:48	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/28/11 18:48	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/28/11 18:48	1
<b>1,1-Dichloroethene</b>	<b>6.5</b>		5.0	0.29	ug/L			12/28/11 18:48	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/28/11 18:48	1
Acetone	<20		20	1.9	ug/L			12/28/11 18:48	1
Methylene Chloride	<10		10	0.63	ug/L			12/28/11 18:48	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/28/11 18:48	1
<b>1,1-Dichloroethane</b>	<b>16</b>		5.0	0.24	ug/L			12/28/11 18:48	1
<b>cis-1,2-Dichloroethene</b>	<b>46</b>		5.0	0.22	ug/L			12/28/11 18:48	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/28/11 18:48	1
Chloroform	<5.0		5.0	0.25	ug/L			12/28/11 18:48	1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L			12/28/11 18:48	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/28/11 18:48	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/28/11 18:48	1
<b>Trichloroethene</b>	<b>58</b>		5.0	0.18	ug/L			12/28/11 18:48	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/28/11 18:48	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/28/11 18:48	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/28/11 18:48	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/28/11 18:48	1
Toluene	<5.0		5.0	0.15	ug/L			12/28/11 18:48	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/28/11 18:48	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/28/11 18:48	1
<b>Tetrachloroethene</b>	<b>6.6</b>		5.0	0.22	ug/L			12/28/11 18:48	1
2-Hexanone	<20		20	0.56	ug/L			12/28/11 18:48	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/28/11 18:48	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/28/11 18:48	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/28/11 18:48	1
Styrene	<5.0		5.0	0.26	ug/L			12/28/11 18:48	1
Bromoform	<5.0		5.0	0.45	ug/L			12/28/11 18:48	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/28/11 18:48	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/28/11 18:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	89		77 - 124				12/28/11 18:48	1	
Toluene-d8 (Surr)	103		80 - 121				12/28/11 18:48	1	
4-Bromofluorobenzene (Surr)	92		77 - 112				12/28/11 18:48	1	
Dibromofluoromethane	96		78 - 119				12/28/11 18:48	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW9**

Date Collected: 12/20/11 09:40

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-2**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 12:11	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 12:11	1
<b>Vinyl chloride</b>	<b>14</b>		2.0	0.13	ug/L			12/29/11 12:11	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 12:11	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 12:11	1
<b>1,1-Dichloroethene</b>	<b>12</b>		5.0	0.29	ug/L			12/29/11 12:11	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 12:11	1
Acetone	<20		20	1.9	ug/L			12/29/11 12:11	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 12:11	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 12:11	1
<b>1,1-Dichloroethane</b>	<b>11</b>		5.0	0.24	ug/L			12/29/11 12:11	1
<b>cis-1,2-Dichloroethene</b>	<b>120</b>		5.0	0.22	ug/L			12/29/11 12:11	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 12:11	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 12:11	1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L			12/29/11 12:11	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 12:11	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 12:11	1
<b>Trichloroethene</b>	<b>20</b>		5.0	0.18	ug/L			12/29/11 12:11	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 12:11	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 12:11	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 12:11	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 12:11	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 12:11	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 12:11	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 12:11	1
Tetrachloroethene	<5.0		5.0	0.22	ug/L			12/29/11 12:11	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 12:11	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 12:11	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 12:11	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 12:11	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 12:11	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 12:11	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 12:11	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 12:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	79		77 - 124				12/29/11 12:11	1	
Toluene-d8 (Surr)	105		80 - 121				12/29/11 12:11	1	
4-Bromofluorobenzene (Surr)	88		77 - 112				12/29/11 12:11	1	
Dibromofluoromethane	83		78 - 119				12/29/11 12:11	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW7**

Date Collected: 12/20/11 10:45

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-3**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 12:56	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 12:56	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/29/11 12:56	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 12:56	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 12:56	1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L			12/29/11 12:56	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 12:56	1
Acetone	<20		20	1.9	ug/L			12/29/11 12:56	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 12:56	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 12:56	1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L			12/29/11 12:56	1
<b>cis-1,2-Dichloroethene</b>	<b>6.5</b>		5.0	0.22	ug/L			12/29/11 12:56	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 12:56	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 12:56	1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L			12/29/11 12:56	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 12:56	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 12:56	1
Trichloroethene	<5.0		5.0	0.18	ug/L			12/29/11 12:56	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 12:56	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 12:56	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 12:56	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 12:56	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 12:56	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 12:56	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 12:56	1
Tetrachloroethene	<5.0		5.0	0.22	ug/L			12/29/11 12:56	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 12:56	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 12:56	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 12:56	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 12:56	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 12:56	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 12:56	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 12:56	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 12:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		77 - 124		12/29/11 12:56	1
Toluene-d8 (Surr)	99		80 - 121		12/29/11 12:56	1
4-Bromofluorobenzene (Surr)	91		77 - 112		12/29/11 12:56	1
Dibromofluoromethane	91		78 - 119		12/29/11 12:56	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW6**

Date Collected: 12/20/11 11:19

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-4**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 13:20	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 13:20	1
<b>Vinyl chloride</b>	<b>11</b>		2.0	0.13	ug/L			12/29/11 13:20	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 13:20	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 13:20	1
<b>1,1-Dichloroethene</b>	<b>14</b>		5.0	0.29	ug/L			12/29/11 13:20	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 13:20	1
Acetone	<20		20	1.9	ug/L			12/29/11 13:20	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 13:20	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 13:20	1
<b>1,1-Dichloroethane</b>	<b>7.0</b>		5.0	0.24	ug/L			12/29/11 13:20	1
<b>cis-1,2-Dichloroethene</b>	<b>77</b>		5.0	0.22	ug/L			12/29/11 13:20	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 13:20	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 13:20	1
<b>1,1,1-Trichloroethane</b>	<b>17</b>		5.0	0.26	ug/L			12/29/11 13:20	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 13:20	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 13:20	1
<b>Trichloroethene</b>	<b>94</b>		5.0	0.18	ug/L			12/29/11 13:20	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 13:20	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 13:20	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 13:20	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 13:20	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 13:20	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 13:20	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 13:20	1
<b>Tetrachloroethene</b>	<b>27</b>		5.0	0.22	ug/L			12/29/11 13:20	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 13:20	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 13:20	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 13:20	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 13:20	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 13:20	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 13:20	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 13:20	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 13:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	89		77 - 124						1
Toluene-d8 (Surr)	102		80 - 121						1
4-Bromofluorobenzene (Surr)	91		77 - 112						1
Dibromofluoromethane	92		78 - 119						1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW5**

Date Collected: 12/20/11 12:00

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-5**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 14:55	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 14:55	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/29/11 14:55	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 14:55	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 14:55	1
<b>1,1-Dichloroethene</b>	<b>18</b>		5.0	0.29	ug/L			12/29/11 14:55	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 14:55	1
Acetone	<20		20	1.9	ug/L			12/29/11 14:55	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 14:55	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 14:55	1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L			12/29/11 14:55	1
<b>cis-1,2-Dichloroethene</b>	<b>71</b>		5.0	0.22	ug/L			12/29/11 14:55	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 14:55	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 14:55	1
<b>1,1,1-Trichloroethane</b>	<b>18</b>		5.0	0.26	ug/L			12/29/11 14:55	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 14:55	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 14:55	1
<b>Trichloroethene</b>	<b>150</b>		5.0	0.18	ug/L			12/29/11 14:55	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 14:55	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 14:55	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 14:55	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 14:55	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 14:55	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 14:55	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 14:55	1
<b>Tetrachloroethene</b>	<b>45</b>		5.0	0.22	ug/L			12/29/11 14:55	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 14:55	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 14:55	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 14:55	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 14:55	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 14:55	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 14:55	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 14:55	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 14:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	90		77 - 124				12/29/11 14:55	1	
Toluene-d8 (Surr)	104		80 - 121				12/29/11 14:55	1	
4-Bromofluorobenzene (Surr)	93		77 - 112				12/29/11 14:55	1	
Dibromofluoromethane	95		78 - 119				12/29/11 14:55	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW4**

Date Collected: 12/20/11 13:03

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-6**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 15:36	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 15:36	1
<b>Vinyl chloride</b>	<b>33</b>		2.0	0.13	ug/L			12/29/11 15:36	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 15:36	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 15:36	1
<b>1,1-Dichloroethene</b>	<b>6.2</b>		5.0	0.29	ug/L			12/29/11 15:36	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 15:36	1
Acetone	<20		20	1.9	ug/L			12/29/11 15:36	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 15:36	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 15:36	1
<b>1,1-Dichloroethane</b>	<b>7.9</b>		5.0	0.24	ug/L			12/29/11 15:36	1
<b>cis-1,2-Dichloroethene</b>	<b>78</b>		5.0	0.22	ug/L			12/29/11 15:36	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 15:36	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 15:36	1
<b>1,1,1-Trichloroethane</b>	<b>11</b>		5.0	0.26	ug/L			12/29/11 15:36	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 15:36	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 15:36	1
Trichloroethene	<5.0		5.0	0.18	ug/L			12/29/11 15:36	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 15:36	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 15:36	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 15:36	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 15:36	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 15:36	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 15:36	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 15:36	1
Tetrachloroethene	<5.0		5.0	0.22	ug/L			12/29/11 15:36	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 15:36	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 15:36	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 15:36	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 15:36	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 15:36	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 15:36	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 15:36	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 15:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	94		77 - 124				12/29/11 15:36	1	
Toluene-d8 (Surr)	104		80 - 121				12/29/11 15:36	1	
4-Bromofluorobenzene (Surr)	93		77 - 112				12/29/11 15:36	1	
Dibromofluoromethane	95		78 - 119				12/29/11 15:36	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW3**

Date Collected: 12/20/11 13:31

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-7**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 16:11	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 16:11	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/29/11 16:11	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 16:11	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 16:11	1
<b>1,1-Dichloroethene</b>	<b>19</b>		5.0	0.29	ug/L			12/29/11 16:11	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 16:11	1
Acetone	<20		20	1.9	ug/L			12/29/11 16:11	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 16:11	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 16:11	1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L			12/29/11 16:11	1
<b>cis-1,2-Dichloroethene</b>	<b>46</b>		5.0	0.22	ug/L			12/29/11 16:11	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 16:11	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 16:11	1
<b>1,1,1-Trichloroethane</b>	<b>18</b>		5.0	0.26	ug/L			12/29/11 16:11	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 16:11	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 16:11	1
<b>Trichloroethene</b>	<b>230</b>		50	1.8	ug/L			12/29/11 16:35	10
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 16:11	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 16:11	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 16:11	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 16:11	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 16:11	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 16:11	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 16:11	1
<b>Tetrachloroethene</b>	<b>54</b>		5.0	0.22	ug/L			12/29/11 16:11	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 16:11	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 16:11	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 16:11	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 16:11	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 16:11	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 16:11	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 16:11	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		77 - 124		12/29/11 16:11	1
1,2-Dichloroethane-d4 (Surr)	86		77 - 124		12/29/11 16:35	10
Toluene-d8 (Surr)	103		80 - 121		12/29/11 16:11	1
Toluene-d8 (Surr)	96		80 - 121		12/29/11 16:35	10
4-Bromofluorobenzene (Surr)	93		77 - 112		12/29/11 16:11	1
4-Bromofluorobenzene (Surr)	84		77 - 112		12/29/11 16:35	10
Dibromofluoromethane	90		78 - 119		12/29/11 16:11	1
Dibromofluoromethane	88		78 - 119		12/29/11 16:35	10

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW2**

Date Collected: 12/20/11 14:02

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-8**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 16:58	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 16:58	1
<b>Vinyl chloride</b>	<b>2.8</b>		2.0	0.13	ug/L			12/29/11 16:58	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 16:58	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 16:58	1
<b>1,1-Dichloroethene</b>	<b>15</b>		5.0	0.29	ug/L			12/29/11 16:58	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 16:58	1
Acetone	<20		20	1.9	ug/L			12/29/11 16:58	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 16:58	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 16:58	1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L			12/29/11 16:58	1
<b>cis-1,2-Dichloroethene</b>	<b>53</b>		5.0	0.22	ug/L			12/29/11 16:58	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 16:58	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 16:58	1
<b>1,1,1-Trichloroethane</b>	<b>14</b>		5.0	0.26	ug/L			12/29/11 16:58	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 16:58	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 16:58	1
<b>Trichloroethene</b>	<b>140</b>		5.0	0.18	ug/L			12/29/11 16:58	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 16:58	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 16:58	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 16:58	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 16:58	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 16:58	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 16:58	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 16:58	1
<b>Tetrachloroethene</b>	<b>34</b>		5.0	0.22	ug/L			12/29/11 16:58	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 16:58	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 16:58	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 16:58	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 16:58	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 16:58	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 16:58	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 16:58	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 16:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	92		77 - 124				12/29/11 16:58	1	
Toluene-d8 (Surr)	102		80 - 121				12/29/11 16:58	1	
4-Bromofluorobenzene (Surr)	93		77 - 112				12/29/11 16:58	1	
Dibromofluoromethane	94		78 - 119				12/29/11 16:58	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

**Client Sample ID: MW1**

Date Collected: 12/20/11 14:29

Date Received: 12/21/11 11:40

**Lab Sample ID: 500-43406-9**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 17:45	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 17:45	1
<b>Vinyl chloride</b>	<b>15</b>		2.0	0.13	ug/L			12/29/11 17:45	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 17:45	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 17:45	1
<b>1,1-Dichloroethene</b>	<b>13</b>		5.0	0.29	ug/L			12/29/11 17:45	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 17:45	1
Acetone	<20		20	1.9	ug/L			12/29/11 17:45	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 17:45	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 17:45	1
<b>1,1-Dichloroethane</b>	<b>12</b>		5.0	0.24	ug/L			12/29/11 17:45	1
<b>cis-1,2-Dichloroethene</b>	<b>140</b>		5.0	0.22	ug/L			12/29/11 17:45	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 17:45	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 17:45	1
<b>1,1,1-Trichloroethane</b>	<b>5.2</b>		5.0	0.26	ug/L			12/29/11 17:45	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 17:45	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 17:45	1
<b>Trichloroethene</b>	<b>21</b>		5.0	0.18	ug/L			12/29/11 17:45	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 17:45	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 17:45	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 17:45	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 17:45	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 17:45	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 17:45	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 17:45	1
Tetrachloroethene	<5.0		5.0	0.22	ug/L			12/29/11 17:45	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 17:45	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 17:45	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 17:45	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 17:45	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 17:45	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 17:45	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 17:45	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 17:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	88		77 - 124				12/29/11 17:45	1	
Toluene-d8 (Surr)	99		80 - 121				12/29/11 17:45	1	
4-Bromofluorobenzene (Surr)	89		77 - 112				12/29/11 17:45	1	
Dibromofluoromethane	91		78 - 119				12/29/11 17:45	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Client Sample ID: FB

Date Collected: 12/20/11 14:45  
 Date Received: 12/21/11 11:40

## Lab Sample ID: 500-43406-10

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 18:32	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 18:32	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/29/11 18:32	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 18:32	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 18:32	1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L			12/29/11 18:32	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 18:32	1
Acetone	<20		20	1.9	ug/L			12/29/11 18:32	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 18:32	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 18:32	1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L			12/29/11 18:32	1
cis-1,2-Dichloroethene	<5.0		5.0	0.22	ug/L			12/29/11 18:32	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 18:32	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 18:32	1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L			12/29/11 18:32	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 18:32	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 18:32	1
Trichloroethene	<5.0		5.0	0.18	ug/L			12/29/11 18:32	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 18:32	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 18:32	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 18:32	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 18:32	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 18:32	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 18:32	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 18:32	1
Tetrachloroethene	<5.0		5.0	0.22	ug/L			12/29/11 18:32	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 18:32	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 18:32	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 18:32	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 18:32	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 18:32	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 18:32	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 18:32	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		77 - 124		12/29/11 18:32	1
Toluene-d8 (Surr)	102		80 - 121		12/29/11 18:32	1
4-Bromofluorobenzene (Surr)	90		77 - 112		12/29/11 18:32	1
Dibromofluoromethane	94		78 - 119		12/29/11 18:32	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Client Sample ID: Trip Blank

Date Collected: 12/20/11 00:00

Date Received: 12/21/11 11:40

## Lab Sample ID: 500-43406-11

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 18:55	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 18:55	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/29/11 18:55	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 18:55	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 18:55	1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L			12/29/11 18:55	1
Carbon disulfide	<5.0		5.0	0.44	ug/L			12/29/11 18:55	1
Acetone	<20		20	1.9	ug/L			12/29/11 18:55	1
Methylene Chloride	<10		10	0.63	ug/L			12/29/11 18:55	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L			12/29/11 18:55	1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L			12/29/11 18:55	1
cis-1,2-Dichloroethene	<5.0		5.0	0.22	ug/L			12/29/11 18:55	1
Methyl Ethyl Ketone	<20		20	1.0	ug/L			12/29/11 18:55	1
Chloroform	<5.0		5.0	0.25	ug/L			12/29/11 18:55	1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L			12/29/11 18:55	1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L			12/29/11 18:55	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			12/29/11 18:55	1
Trichloroethene	<5.0		5.0	0.18	ug/L			12/29/11 18:55	1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L			12/29/11 18:55	1
Bromodichloromethane	<5.0		5.0	0.23	ug/L			12/29/11 18:55	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L			12/29/11 18:55	1
methyl isobutyl ketone	<20		20	0.79	ug/L			12/29/11 18:55	1
Toluene	<5.0		5.0	0.15	ug/L			12/29/11 18:55	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L			12/29/11 18:55	1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L			12/29/11 18:55	1
Tetrachloroethene	<5.0		5.0	0.22	ug/L			12/29/11 18:55	1
2-Hexanone	<20		20	0.56	ug/L			12/29/11 18:55	1
Dibromochloromethane	<5.0		5.0	0.25	ug/L			12/29/11 18:55	1
Chlorobenzene	<5.0		5.0	0.24	ug/L			12/29/11 18:55	1
Ethylbenzene	<5.0		5.0	0.14	ug/L			12/29/11 18:55	1
Styrene	<5.0		5.0	0.26	ug/L			12/29/11 18:55	1
Bromoform	<5.0		5.0	0.45	ug/L			12/29/11 18:55	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L			12/29/11 18:55	1
Xylenes, Total	<5.0		5.0	0.30	ug/L			12/29/11 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		77 - 124		12/29/11 18:55	1
Toluene-d8 (Surr)	100		80 - 121		12/29/11 18:55	1
4-Bromofluorobenzene (Surr)	86		77 - 112		12/29/11 18:55	1
Dibromofluoromethane	91		78 - 119		12/29/11 18:55	1

## Definitions/Glossary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

✉	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## GC/MS VOA

### Analysis Batch: 136978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-43406-1	MW8	Total/NA	Water	8260B	
LCS 500-136978/5	Lab Control Sample	Total/NA	Water	8260B	
MB 500-136978/4	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 137060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-43406-2	MW9	Total/NA	Water	8260B	
500-43406-3	MW7	Total/NA	Water	8260B	
500-43406-4	MW6	Total/NA	Water	8260B	
500-43406-4 MS	MW6	Total/NA	Water	8260B	
500-43406-4 MSD	MW6	Total/NA	Water	8260B	
500-43406-5	MW5	Total/NA	Water	8260B	
500-43406-6	MW4	Total/NA	Water	8260B	
500-43406-7	MW3	Total/NA	Water	8260B	
500-43406-7	MW3	Total/NA	Water	8260B	
500-43406-8	MW2	Total/NA	Water	8260B	
500-43406-9	MW1	Total/NA	Water	8260B	
500-43406-10	FB	Total/NA	Water	8260B	
500-43406-11	Trip Blank	Total/NA	Water	8260B	
LCS 500-137060/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-137060/3	Method Blank	Total/NA	Water	8260B	

# Surrogate Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (77-124)	TOL (80-121)	BFB (77-112)	DBFM (78-119)
500-43406-1	MW8	89	103	92	96
500-43406-2	MW9	79	105	88	83
500-43406-3	MW7	91	99	91	91
500-43406-4	MW6	89	102	91	92
500-43406-4 MS	MW6	91	98	97	97
500-43406-4 MSD	MW6	89	102	97	100
500-43406-5	MW5	90	104	93	95
500-43406-6	MW4	94	104	93	95
500-43406-7	MW3	87	103	93	90
500-43406-7	MW3	86	96	84	88
500-43406-8	MW2	92	102	93	94
500-43406-9	MW1	88	99	89	91
500-43406-10	FB	88	102	90	94
500-43406-11	Trip Blank	88	100	86	91
LCS 500-136978/5	Lab Control Sample	93	101	100	98
LCS 500-137060/4	Lab Control Sample	82	103	97	88
MB 500-136978/4	Method Blank	89	106	93	94
MB 500-137060/3	Method Blank	91	107	97	95

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID:** MB 500-136978/4

**Matrix:** Water

**Analysis Batch:** 136978

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier				
Benzene	<5.0		5.0	0.12 ug/L	12/28/11 14:06	1
Chloromethane	<5.0		5.0	0.24 ug/L	12/28/11 14:06	1
Vinyl chloride	<2.0		2.0	0.13 ug/L	12/28/11 14:06	1
Bromomethane	<5.0		5.0	0.49 ug/L	12/28/11 14:06	1
Chloroethane	<5.0		5.0	0.33 ug/L	12/28/11 14:06	1
1,1-Dichloroethene	<5.0		5.0	0.29 ug/L	12/28/11 14:06	1
Carbon disulfide	<5.0		5.0	0.44 ug/L	12/28/11 14:06	1
Acetone	<20		20	1.9 ug/L	12/28/11 14:06	1
Methylene Chloride	<10		10	0.63 ug/L	12/28/11 14:06	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27 ug/L	12/28/11 14:06	1
1,1-Dichloroethane	<5.0		5.0	0.24 ug/L	12/28/11 14:06	1
cis-1,2-Dichloroethene	<5.0		5.0	0.22 ug/L	12/28/11 14:06	1
Methyl Ethyl Ketone	<20		20	1.0 ug/L	12/28/11 14:06	1
Chloroform	<5.0		5.0	0.25 ug/L	12/28/11 14:06	1
1,1,1-Trichloroethane	<5.0		5.0	0.26 ug/L	12/28/11 14:06	1
Carbon tetrachloride	<5.0		5.0	0.28 ug/L	12/28/11 14:06	1
1,2-Dichloroethane	<5.0		5.0	0.28 ug/L	12/28/11 14:06	1
Trichloroethene	<5.0		5.0	0.18 ug/L	12/28/11 14:06	1
1,2-Dichloropropane	<5.0		5.0	0.36 ug/L	12/28/11 14:06	1
Bromodichloromethane	<5.0		5.0	0.23 ug/L	12/28/11 14:06	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28 ug/L	12/28/11 14:06	1
methyl isobutyl ketone	<20		20	0.79 ug/L	12/28/11 14:06	1
Toluene	<5.0		5.0	0.15 ug/L	12/28/11 14:06	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35 ug/L	12/28/11 14:06	1
1,1,2-Trichloroethane	<5.0		5.0	0.30 ug/L	12/28/11 14:06	1
Tetrachloroethene	<5.0		5.0	0.22 ug/L	12/28/11 14:06	1
2-Hexanone	<20		20	0.56 ug/L	12/28/11 14:06	1
Dibromochloromethane	<5.0		5.0	0.25 ug/L	12/28/11 14:06	1
Chlorobenzene	<5.0		5.0	0.24 ug/L	12/28/11 14:06	1
Ethylbenzene	<5.0		5.0	0.14 ug/L	12/28/11 14:06	1
Styrene	<5.0		5.0	0.26 ug/L	12/28/11 14:06	1
Bromoform	<5.0		5.0	0.45 ug/L	12/28/11 14:06	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35 ug/L	12/28/11 14:06	1
Xylenes, Total	<5.0		5.0	0.30 ug/L	12/28/11 14:06	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	89		77 - 124		12/28/11 14:06	1
Toluene-d8 (Surr)	106		80 - 121		12/28/11 14:06	1
4-Bromofluorobenzene (Surr)	93		77 - 112		12/28/11 14:06	1
Dibromofluoromethane	94		78 - 119		12/28/11 14:06	1

**Lab Sample ID:** LCS 500-136978/5

**Matrix:** Water

**Analysis Batch:** 136978

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	D	%Rec	Limits
	Added	Result	Qualifier			
Benzene	50.0	46.3		ug/L	93	74 - 113
Chloromethane	50.0	35.1		ug/L	70	36 - 148
Vinyl chloride	50.0	43.9		ug/L	88	47 - 138

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-136978/5**

**Matrix: Water**

**Analysis Batch: 136978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Bromomethane	50.0	46.1		ug/L	92	46 - 155	
Chloroethane	50.0	40.3		ug/L	81	54 - 149	
1,1-Dichloroethene	50.0	39.5		ug/L	79	60 - 126	
Carbon disulfide	50.0	39.5		ug/L	79	36 - 110	
Acetone	50.0	39.3		ug/L	79	43 - 153	
Methylene Chloride	50.0	47.7		ug/L	95	65 - 125	
trans-1,2-Dichloroethene	50.0	44.8		ug/L	90	67 - 120	
1,1-Dichloroethane	50.0	41.0		ug/L	82	64 - 117	
cis-1,2-Dichloroethene	50.0	46.1		ug/L	92	66 - 111	
Methyl Ethyl Ketone	50.0	40.0		ug/L	80	42 - 152	
Chloroform	50.0	43.5		ug/L	87	71 - 116	
1,1,1-Trichloroethane	50.0	42.9		ug/L	86	66 - 128	
Carbon tetrachloride	50.0	43.6		ug/L	87	58 - 132	
1,2-Dichloroethane	50.0	43.2		ug/L	86	69 - 115	
Trichloroethene	50.0	49.9		ug/L	100	75 - 116	
1,2-Dichloropropane	50.0	47.1		ug/L	94	68 - 123	
Bromodichloromethane	50.0	47.3		ug/L	95	73 - 120	
cis-1,3-Dichloropropene	53.8	50.7		ug/L	94	65 - 114	
methyl isobutyl ketone	50.0	46.7		ug/L	93	56 - 138	
Toluene	50.0	47.3		ug/L	95	76 - 121	
trans-1,3-Dichloropropene	48.6	40.7		ug/L	84	60 - 119	
1,1,2-Trichloroethane	50.0	51.3		ug/L	103	62 - 137	
Tetrachloroethene	50.0	50.3		ug/L	101	76 - 114	
2-Hexanone	50.0	48.3		ug/L	97	55 - 138	
Dibromochloromethane	50.0	48.1		ug/L	96	73 - 118	
Chlorobenzene	50.0	48.8		ug/L	98	81 - 111	
Ethylbenzene	50.0	48.5		ug/L	97	79 - 114	
Styrene	50.0	50.1		ug/L	100	76 - 118	
Bromoform	50.0	49.3		ug/L	99	64 - 126	
1,1,2,2-Tetrachloroethane	50.0	51.9		ug/L	104	66 - 121	
Xylenes, Total	150	140		ug/L	93	74 - 117	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	93		77 - 124
Toluene-d8 (Surr)	101		80 - 121
4-Bromofluorobenzene (Surr)	100		77 - 112
Dibromofluoromethane	98		78 - 119

**Lab Sample ID: MB 500-137060/3**

**Matrix: Water**

**Analysis Batch: 137060**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<5.0		5.0	0.12	ug/L			12/29/11 11:24	1
Chloromethane	<5.0		5.0	0.24	ug/L			12/29/11 11:24	1
Vinyl chloride	<2.0		2.0	0.13	ug/L			12/29/11 11:24	1
Bromomethane	<5.0		5.0	0.49	ug/L			12/29/11 11:24	1
Chloroethane	<5.0		5.0	0.33	ug/L			12/29/11 11:24	1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L			12/29/11 11:24	1

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-137060/3**

**Matrix: Water**

**Analysis Batch: 137060**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	<5.0				5.0	0.44	ug/L			12/29/11 11:24	1
Acetone	<20				20	1.9	ug/L			12/29/11 11:24	1
Methylene Chloride	<10				10	0.63	ug/L			12/29/11 11:24	1
trans-1,2-Dichloroethene	<5.0				5.0	0.27	ug/L			12/29/11 11:24	1
1,1-Dichloroethane	<5.0				5.0	0.24	ug/L			12/29/11 11:24	1
cis-1,2-Dichloroethene	<5.0				5.0	0.22	ug/L			12/29/11 11:24	1
Methyl Ethyl Ketone	<20				20	1.0	ug/L			12/29/11 11:24	1
Chloroform	<5.0				5.0	0.25	ug/L			12/29/11 11:24	1
1,1,1-Trichloroethane	<5.0				5.0	0.26	ug/L			12/29/11 11:24	1
Carbon tetrachloride	<5.0				5.0	0.28	ug/L			12/29/11 11:24	1
1,2-Dichloroethane	<5.0				5.0	0.28	ug/L			12/29/11 11:24	1
Trichloroethene	<5.0				5.0	0.18	ug/L			12/29/11 11:24	1
1,2-Dichloropropane	<5.0				5.0	0.36	ug/L			12/29/11 11:24	1
Bromodichloromethane	<5.0				5.0	0.23	ug/L			12/29/11 11:24	1
cis-1,3-Dichloropropene	<5.0				5.0	0.28	ug/L			12/29/11 11:24	1
methyl isobutyl ketone	<20				20	0.79	ug/L			12/29/11 11:24	1
Toluene	<5.0				5.0	0.15	ug/L			12/29/11 11:24	1
trans-1,3-Dichloropropene	<5.0				5.0	0.35	ug/L			12/29/11 11:24	1
1,1,2-Trichloroethane	<5.0				5.0	0.30	ug/L			12/29/11 11:24	1
Tetrachloroethene	<5.0				5.0	0.22	ug/L			12/29/11 11:24	1
2-Hexanone	<20				20	0.56	ug/L			12/29/11 11:24	1
Dibromochloromethane	<5.0				5.0	0.25	ug/L			12/29/11 11:24	1
Chlorobenzene	<5.0				5.0	0.24	ug/L			12/29/11 11:24	1
Ethylbenzene	<5.0				5.0	0.14	ug/L			12/29/11 11:24	1
Styrene	<5.0				5.0	0.26	ug/L			12/29/11 11:24	1
Bromoform	<5.0				5.0	0.45	ug/L			12/29/11 11:24	1
1,1,2,2-Tetrachloroethane	<5.0				5.0	0.35	ug/L			12/29/11 11:24	1
Xylenes, Total	<5.0				5.0	0.30	ug/L			12/29/11 11:24	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		91		77 - 124			1
Toluene-d8 (Surr)	107		107		80 - 121			1
4-Bromofluorobenzene (Surr)	97		97		77 - 112			1
Dibromofluoromethane	95		95		78 - 119			1

**Lab Sample ID: LCS 500-137060/4**

**Matrix: Water**

**Analysis Batch: 137060**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	Prepared	Analyzed	Dil Fac
	Added											
Benzene		50.0		44.7		ug/L		89	74 - 113			
Chloromethane		50.0		35.1		ug/L		70	36 - 148			
Vinyl chloride		50.0		44.8		ug/L		90	47 - 138			
Bromomethane		50.0		47.9		ug/L		96	46 - 155			
Chloroethane		50.0		42.5		ug/L		85	54 - 149			
1,1-Dichloroethene		50.0		38.2		ug/L		76	60 - 126			
Carbon disulfide		50.0		38.9		ug/L		78	36 - 110			
Acetone		50.0		31.8		ug/L		64	43 - 153			
Methylene Chloride		50.0		39.5		ug/L		79	65 - 125			

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-137060/4**

**Matrix: Water**

**Analysis Batch: 137060**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
trans-1,2-Dichloroethene	50.0	43.8		ug/L	88	67 - 120	
1,1-Dichloroethane	50.0	38.0		ug/L	76	64 - 117	
cis-1,2-Dichloroethene	50.0	41.9		ug/L	84	66 - 111	
Methyl Ethyl Ketone	50.0	30.3		ug/L	61	42 - 152	
Chloroform	50.0	39.3		ug/L	79	71 - 116	
1,1,1-Trichloroethane	50.0	42.4		ug/L	85	66 - 128	
Carbon tetrachloride	50.0	45.9		ug/L	92	58 - 132	
1,2-Dichloroethane	50.0	37.1		ug/L	74	69 - 115	
Trichloroethene	50.0	48.8		ug/L	98	75 - 116	
1,2-Dichloropropane	50.0	44.4		ug/L	89	68 - 123	
Bromodichloromethane	50.0	42.1		ug/L	84	73 - 120	
cis-1,3-Dichloropropene	53.8	44.2		ug/L	82	65 - 114	
methyl isobutyl ketone	50.0	36.3		ug/L	73	56 - 138	
Toluene	50.0	46.1		ug/L	92	76 - 121	
trans-1,3-Dichloropropene	48.6	34.0		ug/L	70	60 - 119	
1,1,2-Trichloroethane	50.0	43.4		ug/L	87	62 - 137	
Tetrachloroethene	50.0	52.2		ug/L	104	76 - 114	
2-Hexanone	50.0	37.8		ug/L	76	55 - 138	
Dibromochloromethane	50.0	40.9		ug/L	82	73 - 118	
Chlorobenzene	50.0	48.0		ug/L	96	81 - 111	
Ethylbenzene	50.0	50.0		ug/L	100	79 - 114	
Styrene	50.0	48.2		ug/L	96	76 - 118	
Bromoform	50.0	41.8		ug/L	84	64 - 126	
1,1,2,2-Tetrachloroethane	50.0	45.3		ug/L	91	66 - 121	
Xylenes, Total	150	141		ug/L	94	74 - 117	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	82		77 - 124
Toluene-d8 (Surr)	103		80 - 121
4-Bromofluorobenzene (Surr)	97		77 - 112
Dibromofluoromethane	88		78 - 119

**Lab Sample ID: 500-43406-4 MS**

**Matrix: Water**

**Analysis Batch: 137060**

**Client Sample ID: MW6**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
									Limits
Benzene	<5.0		50.0	44.8		ug/L	90	74 - 113	
Chloromethane	<5.0		50.0	36.6		ug/L	73	36 - 148	
Vinyl chloride	11		50.0	57.4		ug/L	92	47 - 138	
Bromomethane	<5.0		50.0	52.0		ug/L	104	46 - 155	
Chloroethane	<5.0		50.0	42.2		ug/L	84	54 - 149	
1,1-Dichloroethene	14		50.0	53.5		ug/L	80	60 - 126	
Carbon disulfide	<5.0		50.0	40.0		ug/L	80	36 - 110	
Acetone	<20		50.0	34.5		ug/L	69	43 - 153	
Methylene Chloride	<10		50.0	42.6		ug/L	85	65 - 125	
trans-1,2-Dichloroethene	<5.0		50.0	45.8		ug/L	90	67 - 120	
1,1-Dichloroethane	7.0		50.0	47.0		ug/L	80	64 - 117	
cis-1,2-Dichloroethene	77		50.0	122		ug/L	90	66 - 111	

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-43406-4 MS**

**Matrix: Water**

**Analysis Batch: 137060**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Methyl Ethyl Ketone	<20		50.0	38.8		ug/L	78	42 - 152	
Chloroform	<5.0		50.0	42.2		ug/L	84	71 - 116	
1,1,1-Trichloroethane	17		50.0	59.6		ug/L	86	66 - 128	
Carbon tetrachloride	<5.0		50.0	44.2		ug/L	88	58 - 132	
1,2-Dichloroethane	<5.0		50.0	41.1		ug/L	82	69 - 115	
Trichloroethylene	94		50.0	138		ug/L	88	75 - 116	
1,2-Dichloropropane	<5.0		50.0	45.3		ug/L	91	68 - 123	
Bromodichloromethane	<5.0		50.0	45.3		ug/L	91	73 - 120	
cis-1,3-Dichloropropene	<5.0		53.8	45.7		ug/L	85	65 - 114	
methyl isobutyl ketone	<20		50.0	45.0		ug/L	90	56 - 138	
Toluene	<5.0		50.0	45.2		ug/L	90	76 - 121	
trans-1,3-Dichloropropene	<5.0		48.6	37.2		ug/L	77	60 - 119	
1,1,2-Trichloroethane	<5.0		50.0	48.3		ug/L	97	62 - 137	
Tetrachloroethylene	27		50.0	78.2		ug/L	102	76 - 114	
2-Hexanone	<20		50.0	46.5		ug/L	93	55 - 138	
Dibromochloromethane	<5.0		50.0	45.3		ug/L	91	73 - 118	
Chlorobenzene	<5.0		50.0	46.8		ug/L	94	81 - 111	
Ethylbenzene	<5.0		50.0	47.3		ug/L	95	79 - 114	
Styrene	<5.0		50.0	49.0		ug/L	98	76 - 118	
Bromoform	<5.0		50.0	47.9		ug/L	96	64 - 126	
1,1,2,2-Tetrachloroethane	<5.0		50.0	50.0		ug/L	100	66 - 121	
Xylenes, Total	<5.0		150	137		ug/L	92	74 - 117	

**MS**    **MS**

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	91		77 - 124
Toluene-d8 (Surr)	98		80 - 121
4-Bromofluorobenzene (Surr)	97		77 - 112
Dibromofluoromethane	97		78 - 119

**Lab Sample ID: 500-43406-4 MSD**

**Matrix: Water**

**Analysis Batch: 137060**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<5.0		50.0	45.5		ug/L	91	74 - 113	2 20
Chloromethane	<5.0		50.0	37.1		ug/L	74	36 - 148	1 20
Vinyl chloride	11		50.0	59.2		ug/L	96	47 - 138	3 20
Bromomethane	<5.0		50.0	53.5		ug/L	107	46 - 155	3 20
Chloroethane	<5.0		50.0	44.3		ug/L	89	54 - 149	5 20
1,1-Dichloroethene	14		50.0	56.2		ug/L	85	60 - 126	5 20
Carbon disulfide	<5.0		50.0	41.4		ug/L	83	36 - 110	3 20
Acetone	<20		50.0	34.3		ug/L	69	43 - 153	1 20
Methylene Chloride	<10		50.0	44.9		ug/L	90	65 - 125	5 20
trans-1,2-Dichloroethene	<5.0		50.0	48.2		ug/L	95	67 - 120	5 20
1,1-Dichloroethane	7.0		50.0	49.6		ug/L	85	64 - 117	5 20
cis-1,2-Dichloroethene	77		50.0	128		ug/L	101	66 - 111	4 20
Methyl Ethyl Ketone	<20		50.0	37.2		ug/L	74	42 - 152	4 20
Chloroform	<5.0		50.0	44.3		ug/L	89	71 - 116	5 20
1,1,1-Trichloroethane	17		50.0	63.4		ug/L	94	66 - 128	6 20

**Client Sample ID: MW6**

**Prep Type: Total/NA**

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-43406-4 MSD**

**Matrix: Water**

**Analysis Batch: 137060**

**Client Sample ID: MW6**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Carbon tetrachloride	<5.0		50.0	46.4		ug/L	93	58 - 132		5	20	
1,2-Dichloroethane	<5.0		50.0	41.8		ug/L	84	69 - 115		2	20	
Trichloroethene	94		50.0	141		ug/L	94	75 - 116		2	20	
1,2-Dichloropropane	<5.0		50.0	46.4		ug/L	93	68 - 123		2	20	
Bromodichloromethane	<5.0		50.0	45.4		ug/L	91	73 - 120		0	20	
cis-1,3-Dichloropropene	<5.0		53.8	46.9		ug/L	87	65 - 114		3	20	
methyl isobutyl ketone	<20		50.0	42.9		ug/L	86	56 - 138		5	20	
Toluene	<5.0		50.0	45.9		ug/L	92	76 - 121		2	20	
trans-1,3-Dichloropropene	<5.0		48.6	37.5		ug/L	77	60 - 119		1	20	
1,1,2-Trichloroethane	<5.0		50.0	48.9		ug/L	98	62 - 137		1	20	
Tetrachloroethene	27		50.0	78.8		ug/L	104	76 - 114		1	20	
2-Hexanone	<20		50.0	45.2		ug/L	90	55 - 138		3	20	
Dibromochloromethane	<5.0		50.0	44.9		ug/L	90	73 - 118		1	20	
Chlorobenzene	<5.0		50.0	48.2		ug/L	96	81 - 111		3	20	
Ethylbenzene	<5.0		50.0	48.4		ug/L	97	79 - 114		2	20	
Styrene	<5.0		50.0	49.9		ug/L	100	76 - 118		2	20	
Bromoform	<5.0		50.0	48.7		ug/L	97	64 - 126		2	20	
1,1,2,2-Tetrachloroethane	<5.0		50.0	49.4		ug/L	99	66 - 121		1	20	
Xylenes, Total	<5.0		150	140		ug/L	94	74 - 117		2	20	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		77 - 124
Toluene-d8 (Surr)	102		80 - 121
4-Bromofluorobenzene (Surr)	97		77 - 112
Dibromofluoromethane	100		78 - 119

## Certification Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-43406-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago	ACCLASS	DoD ELAP		ADE-1429
TestAmerica Chicago	ACCLASS	ISO/IEC 17025		AT-1428
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	Georgia EPD	4	N/A
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	Kentucky UST	4	66
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina	North Carolina DENR	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	USDA		P330-09-00027
TestAmerica Chicago	Virginia	NELAC Secondary AB	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



## Login Sample Receipt Checklist

Client: Environmental Information Logistics (EIL)

Job Number: 500-43406-1

**Login Number: 43406**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Kelsey, Shawn M**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-45507-1

Client Project/Site: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)

975 Burton Street

Unit 10

Beloit, Wisconsin 53511

Attn: Ms. Mary Pearson



Authorized for release by:

4/30/2012 11:37:34 AM

Richard Wright

Project Manager II

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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Expert

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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

### Job ID: 500-45507-1

Laboratory: TestAmerica Chicago

#### Narrative

Job Narrative  
500-45507-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/17/2012 10:20 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0 C.

#### GC/MS VOA

No analytical or quality issues were noted.

## Detection Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

### Client Sample ID: MW-7

Lab Sample ID: 500-45507-1

No Detections

### Client Sample ID: MW-8

Lab Sample ID: 500-45507-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	7.7		1.0	0.24	ug/L	1		8260B	Total/NA

### Client Sample ID: MW-9

Lab Sample ID: 500-45507-3

No Detections

### Client Sample ID: Trip Blank

Lab Sample ID: 500-45507-4

No Detections

## Method Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-45507-1	MW-7	Water	04/16/12 11:00	04/17/12 10:20
500-45507-2	MW-8	Water	04/16/12 11:31	04/17/12 10:20
500-45507-3	MW-9	Water	04/16/12 11:50	04/17/12 10:20
500-45507-4	Trip Blank	Water	04/16/12 00:00	04/17/12 10:20

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

**Client Sample ID: MW-7**

Date Collected: 04/16/12 11:00

Date Received: 04/17/12 10:20

**Lab Sample ID: 500-45507-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L		04/26/12 14:13		1
Chloromethane	<5.0		5.0	0.24	ug/L		04/26/12 14:13		1
Vinyl chloride	<2.0		2.0	0.13	ug/L		04/26/12 14:13		1
Bromomethane	<5.0		5.0	0.49	ug/L		04/26/12 14:13		1
Chloroethane	<5.0		5.0	0.33	ug/L		04/26/12 14:13		1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L		04/26/12 14:13		1
Carbon disulfide	<5.0		5.0	0.44	ug/L		04/26/12 14:13		1
Acetone	<20		20	1.9	ug/L		04/26/12 14:13		1
Methylene Chloride	<10		10	0.63	ug/L		04/26/12 14:13		1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L		04/26/12 14:13		1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L		04/26/12 14:13		1
cis-1,2-Dichloroethene	<5.0		5.0	0.22	ug/L		04/26/12 14:13		1
Methyl Ethyl Ketone	<20		20	1.0	ug/L		04/26/12 14:13		1
Chloroform	<5.0		5.0	0.25	ug/L		04/26/12 14:13		1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L		04/26/12 14:13		1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L		04/26/12 14:13		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		04/26/12 14:13		1
Trichloroethene	<5.0		5.0	0.18	ug/L		04/26/12 14:13		1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L		04/26/12 14:13		1
Bromodichloromethane	<5.0		5.0	0.23	ug/L		04/26/12 14:13		1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L		04/26/12 14:13		1
methyl isobutyl ketone	<20		20	0.79	ug/L		04/26/12 14:13		1
Toluene	<5.0		5.0	0.15	ug/L		04/26/12 14:13		1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L		04/26/12 14:13		1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L		04/26/12 14:13		1
Tetrachloroethene	<5.0		5.0	0.22	ug/L		04/26/12 14:13		1
2-Hexanone	<20		20	0.56	ug/L		04/26/12 14:13		1
Dibromochloromethane	<5.0		5.0	0.25	ug/L		04/26/12 14:13		1
Chlorobenzene	<5.0		5.0	0.24	ug/L		04/26/12 14:13		1
Ethylbenzene	<5.0		5.0	0.14	ug/L		04/26/12 14:13		1
Styrene	<5.0		5.0	0.26	ug/L		04/26/12 14:13		1
Bromoform	<5.0		5.0	0.45	ug/L		04/26/12 14:13		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L		04/26/12 14:13		1
Xylenes, Total	<5.0		5.0	0.30	ug/L		04/26/12 14:13		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	87		75 - 131				04/26/12 14:13		1
Toluene-d8 (Surr)	94		80 - 120				04/26/12 14:13		1
4-Bromofluorobenzene (Surr)	94		79 - 120				04/26/12 14:13		1
Dibromofluoromethane	90		74 - 123				04/26/12 14:13		1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

**Client Sample ID: MW-8**

**Lab Sample ID: 500-45507-2**

Date Collected: 04/16/12 11:31

Matrix: Water

Date Received: 04/17/12 10:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	7.7		1.0	0.24	ug/L			04/26/12 14:37	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 131					04/26/12 14:37	1
Toluene-d8 (Surr)	99		80 - 120					04/26/12 14:37	1
4-Bromofluorobenzene (Surr)	90		79 - 120					04/26/12 14:37	1
Dibromofluoromethane	83		74 - 123					04/26/12 14:37	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

**Client Sample ID: MW-9**

**Lab Sample ID: 500-45507-3**

**Matrix: Water**

Date Collected: 04/16/12 11:50

Date Received: 04/17/12 10:20

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L		04/26/12 15:00		1
Chloromethane	<5.0		5.0	0.24	ug/L		04/26/12 15:00		1
Vinyl chloride	<2.0		2.0	0.13	ug/L		04/26/12 15:00		1
Bromomethane	<5.0		5.0	0.49	ug/L		04/26/12 15:00		1
Chloroethane	<5.0		5.0	0.33	ug/L		04/26/12 15:00		1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L		04/26/12 15:00		1
Carbon disulfide	<5.0		5.0	0.44	ug/L		04/26/12 15:00		1
Acetone	<20		20	1.9	ug/L		04/26/12 15:00		1
Methylene Chloride	<10		10	0.63	ug/L		04/26/12 15:00		1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L		04/26/12 15:00		1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L		04/26/12 15:00		1
cis-1,2-Dichloroethene	<5.0		5.0	0.22	ug/L		04/26/12 15:00		1
Methyl Ethyl Ketone	<20		20	1.0	ug/L		04/26/12 15:00		1
Chloroform	<5.0		5.0	0.25	ug/L		04/26/12 15:00		1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L		04/26/12 15:00		1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L		04/26/12 15:00		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		04/26/12 15:00		1
Trichloroethene	<5.0		5.0	0.18	ug/L		04/26/12 15:00		1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L		04/26/12 15:00		1
Bromodichloromethane	<5.0		5.0	0.23	ug/L		04/26/12 15:00		1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L		04/26/12 15:00		1
methyl isobutyl ketone	<20		20	0.79	ug/L		04/26/12 15:00		1
Toluene	<5.0		5.0	0.15	ug/L		04/26/12 15:00		1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L		04/26/12 15:00		1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L		04/26/12 15:00		1
Tetrachloroethene	<5.0		5.0	0.22	ug/L		04/26/12 15:00		1
2-Hexanone	<20		20	0.56	ug/L		04/26/12 15:00		1
Dibromochloromethane	<5.0		5.0	0.25	ug/L		04/26/12 15:00		1
Chlorobenzene	<5.0		5.0	0.24	ug/L		04/26/12 15:00		1
Ethylbenzene	<5.0		5.0	0.14	ug/L		04/26/12 15:00		1
Styrene	<5.0		5.0	0.26	ug/L		04/26/12 15:00		1
Bromoform	<5.0		5.0	0.45	ug/L		04/26/12 15:00		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L		04/26/12 15:00		1
Xylenes, Total	<5.0		5.0	0.30	ug/L		04/26/12 15:00		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 131		04/26/12 15:00	1
Toluene-d8 (Surr)	99		80 - 120		04/26/12 15:00	1
4-Bromofluorobenzene (Surr)	105		79 - 120		04/26/12 15:00	1
Dibromofluoromethane	87		74 - 123		04/26/12 15:00	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-45507-4**

**Matrix: Water**

Date Collected: 04/16/12 00:00

Date Received: 04/17/12 10:20

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.12	ug/L		04/26/12 15:25		1
Chloromethane	<5.0		5.0	0.24	ug/L		04/26/12 15:25		1
Vinyl chloride	<2.0		2.0	0.13	ug/L		04/26/12 15:25		1
Bromomethane	<5.0		5.0	0.49	ug/L		04/26/12 15:25		1
Chloroethane	<5.0		5.0	0.33	ug/L		04/26/12 15:25		1
1,1-Dichloroethene	<5.0		5.0	0.29	ug/L		04/26/12 15:25		1
Carbon disulfide	<5.0		5.0	0.44	ug/L		04/26/12 15:25		1
Acetone	<20		20	1.9	ug/L		04/26/12 15:25		1
Methylene Chloride	<10		10	0.63	ug/L		04/26/12 15:25		1
trans-1,2-Dichloroethene	<5.0		5.0	0.27	ug/L		04/26/12 15:25		1
1,1-Dichloroethane	<5.0		5.0	0.24	ug/L		04/26/12 15:25		1
cis-1,2-Dichloroethene	<5.0		5.0	0.22	ug/L		04/26/12 15:25		1
Methyl Ethyl Ketone	<20		20	1.0	ug/L		04/26/12 15:25		1
Chloroform	<5.0		5.0	0.25	ug/L		04/26/12 15:25		1
1,1,1-Trichloroethane	<5.0		5.0	0.26	ug/L		04/26/12 15:25		1
Carbon tetrachloride	<5.0		5.0	0.28	ug/L		04/26/12 15:25		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		04/26/12 15:25		1
Trichloroethene	<5.0		5.0	0.18	ug/L		04/26/12 15:25		1
1,2-Dichloropropane	<5.0		5.0	0.36	ug/L		04/26/12 15:25		1
Bromodichloromethane	<5.0		5.0	0.23	ug/L		04/26/12 15:25		1
cis-1,3-Dichloropropene	<5.0		5.0	0.28	ug/L		04/26/12 15:25		1
methyl isobutyl ketone	<20		20	0.79	ug/L		04/26/12 15:25		1
Toluene	<5.0		5.0	0.15	ug/L		04/26/12 15:25		1
trans-1,3-Dichloropropene	<5.0		5.0	0.35	ug/L		04/26/12 15:25		1
1,1,2-Trichloroethane	<5.0		5.0	0.30	ug/L		04/26/12 15:25		1
Tetrachloroethene	<5.0		5.0	0.22	ug/L		04/26/12 15:25		1
2-Hexanone	<20		20	0.56	ug/L		04/26/12 15:25		1
Dibromochloromethane	<5.0		5.0	0.25	ug/L		04/26/12 15:25		1
Chlorobenzene	<5.0		5.0	0.24	ug/L		04/26/12 15:25		1
Ethylbenzene	<5.0		5.0	0.14	ug/L		04/26/12 15:25		1
Styrene	<5.0		5.0	0.26	ug/L		04/26/12 15:25		1
Bromoform	<5.0		5.0	0.45	ug/L		04/26/12 15:25		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35	ug/L		04/26/12 15:25		1
Xylenes, Total	<5.0		5.0	0.30	ug/L		04/26/12 15:25		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 131		04/26/12 15:25	1
Toluene-d8 (Surr)	95		80 - 120		04/26/12 15:25	1
4-Bromofluorobenzene (Surr)	96		79 - 120		04/26/12 15:25	1
Dibromofluoromethane	94		74 - 123		04/26/12 15:25	1

## Definitions/Glossary

Client: Environmental Information Logistics (EIL)

Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

## GC/MS VOA

Analysis Batch: 147689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-45507-1	MW-7	Total/NA	Water	8260B	5
500-45507-2	MW-8	Total/NA	Water	8260B	6
500-45507-3	MW-9	Total/NA	Water	8260B	7
500-45507-4	Trip Blank	Total/NA	Water	8260B	8
LCS 500-147689/4	Lab Control Sample	Total/NA	Water	8260B	9
MB 500-147689/5	Method Blank	Total/NA	Water	8260B	10

## Surrogate Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

#### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (75-131)	TOL (80-120)	BFB (79-120)	DBFM (74-123)				
500-45507-1	MW-7	87	94	94	90				
500-45507-2	MW-8	100	99	90	83				
500-45507-3	MW-9	104	99	105	87				
500-45507-4	Trip Blank	101	95	96	94				
LCS 500-147689/4	Lab Control Sample	99	102	95	91				
MB 500-147689/5	Method Blank	101	101	90	87				

#### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID:** MB 500-147689/5

**Matrix:** Water

**Analysis Batch:** 147689

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier				
Benzene	<5.0		5.0	0.12 ug/L	04/26/12 10:12	1
Chloromethane	<5.0		5.0	0.24 ug/L	04/26/12 10:12	1
Vinyl chloride	<2.0		2.0	0.13 ug/L	04/26/12 10:12	1
Bromomethane	<5.0		5.0	0.49 ug/L	04/26/12 10:12	1
Chloroethane	<5.0		5.0	0.33 ug/L	04/26/12 10:12	1
1,1-Dichloroethene	<5.0		5.0	0.29 ug/L	04/26/12 10:12	1
Carbon disulfide	<5.0		5.0	0.44 ug/L	04/26/12 10:12	1
Acetone	<20		20	1.9 ug/L	04/26/12 10:12	1
Methylene Chloride	<10		10	0.63 ug/L	04/26/12 10:12	1
trans-1,2-Dichloroethene	<5.0		5.0	0.27 ug/L	04/26/12 10:12	1
1,1-Dichloroethane	<5.0		5.0	0.24 ug/L	04/26/12 10:12	1
cis-1,2-Dichloroethene	<5.0		5.0	0.22 ug/L	04/26/12 10:12	1
Methyl Ethyl Ketone	<20		20	1.0 ug/L	04/26/12 10:12	1
Chloroform	<5.0		5.0	0.25 ug/L	04/26/12 10:12	1
1,1,1-Trichloroethane	<5.0		5.0	0.26 ug/L	04/26/12 10:12	1
Carbon tetrachloride	<5.0		5.0	0.28 ug/L	04/26/12 10:12	1
1,2-Dichloroethane	<5.0		5.0	0.28 ug/L	04/26/12 10:12	1
Trichloroethene	<5.0		5.0	0.18 ug/L	04/26/12 10:12	1
1,2-Dichloropropane	<5.0		5.0	0.36 ug/L	04/26/12 10:12	1
Bromodichloromethane	<5.0		5.0	0.23 ug/L	04/26/12 10:12	1
cis-1,3-Dichloropropene	<5.0		5.0	0.28 ug/L	04/26/12 10:12	1
methyl isobutyl ketone	<20		20	0.79 ug/L	04/26/12 10:12	1
Toluene	<5.0		5.0	0.15 ug/L	04/26/12 10:12	1
trans-1,3-Dichloropropene	<5.0		5.0	0.35 ug/L	04/26/12 10:12	1
1,1,2-Trichloroethane	<5.0		5.0	0.30 ug/L	04/26/12 10:12	1
Tetrachloroethene	<5.0		5.0	0.22 ug/L	04/26/12 10:12	1
2-Hexanone	<20		20	0.56 ug/L	04/26/12 10:12	1
Dibromochloromethane	<5.0		5.0	0.25 ug/L	04/26/12 10:12	1
Chlorobenzene	<5.0		5.0	0.24 ug/L	04/26/12 10:12	1
Ethylbenzene	<5.0		5.0	0.14 ug/L	04/26/12 10:12	1
Styrene	<5.0		5.0	0.26 ug/L	04/26/12 10:12	1
Bromoform	<5.0		5.0	0.45 ug/L	04/26/12 10:12	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.35 ug/L	04/26/12 10:12	1
Xylenes, Total	<5.0		5.0	0.30 ug/L	04/26/12 10:12	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		75 - 131		04/26/12 10:12	1
Toluene-d8 (Surr)	101		80 - 120		04/26/12 10:12	1
4-Bromofluorobenzene (Surr)	90		79 - 120		04/26/12 10:12	1
Dibromofluoromethane	87		74 - 123		04/26/12 10:12	1

**Lab Sample ID:** LCS 500-147689/4

**Matrix:** Water

**Analysis Batch:** 147689

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Benzene	50.0	48.1		ug/L	96	74 - 115
Chloromethane	50.0	28.2		ug/L	56	56 - 144
Vinyl chloride	50.0	32.3		ug/L	65	51 - 149

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-147689/4

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 147689

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromomethane	50.0	33.0		ug/L	66	47 - 158	
Chloroethane	50.0	33.5		ug/L	67	54 - 143	
1,1-Dichloroethene	50.0	40.0		ug/L	80	58 - 115	
Carbon disulfide	50.0	38.2		ug/L	76	50 - 120	
Acetone	50.0	38.5		ug/L	77	41 - 163	
Methylene Chloride	50.0	39.5		ug/L	79	63 - 130	
trans-1,2-Dichloroethene	50.0	43.5		ug/L	87	74 - 119	
1,1-Dichloroethane	50.0	42.7		ug/L	85	66 - 118	
cis-1,2-Dichloroethene	50.0	44.1		ug/L	88	75 - 119	
Methyl Ethyl Ketone	50.0	41.7		ug/L	83	53 - 140	
Chloroform	50.0	45.2		ug/L	90	76 - 117	
1,1,1-Trichloroethane	50.0	42.1		ug/L	84	77 - 117	
Carbon tetrachloride	50.0	47.2		ug/L	94	72 - 124	
1,2-Dichloroethane	50.0	49.8		ug/L	100	76 - 117	
Trichloroethene	50.0	47.9		ug/L	96	75 - 120	
1,2-Dichloropropane	50.0	50.2		ug/L	100	77 - 118	
Bromodichloromethane	50.0	49.0		ug/L	98	79 - 117	
cis-1,3-Dichloropropene	53.8	52.1		ug/L	97	71 - 112	
methyl isobutyl ketone	50.0	45.8		ug/L	92	59 - 134	
Toluene	50.0	50.2		ug/L	100	80 - 120	
trans-1,3-Dichloropropene	48.6	48.6		ug/L	100	66 - 116	
1,1,2-Trichloroethane	50.0	47.0		ug/L	94	78 - 121	
Tetrachloroethene	50.0	50.6		ug/L	101	71 - 120	
2-Hexanone	50.0	48.0		ug/L	96	60 - 134	
Dibromochloromethane	50.0	49.6		ug/L	99	73 - 120	
Chlorobenzene	50.0	49.4		ug/L	99	80 - 120	
Ethylbenzene	50.0	49.3		ug/L	99	79 - 115	
Styrene	50.0	48.4		ug/L	97	80 - 120	
Bromoform	50.0	49.5		ug/L	99	64 - 127	
1,1,2,2-Tetrachloroethane	50.0	49.9		ug/L	100	78 - 123	
Xylenes, Total	150	145		ug/L	96	78 - 120	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		75 - 131
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	95		79 - 120
Dibromofluoromethane	91		74 - 123

## Certification Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-45507-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	State Program	4	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Kentucky (UST)	State Program	4	66
TestAmerica Chicago	L-A-B	DoD ELAP		L2304
TestAmerica Chicago	L-A-B	ISO/IEC 17025		L2304
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	North Carolina DENR	State Program	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	Federal		P330-12-00038
TestAmerica Chicago	Virginia	NELAC	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

<p>Report To _____            Contact: _____            Company: _____            Address: _____            Address: _____            Phone: _____            Fax: _____            E-Mail: _____</p>	<p>(optional)</p> <p>Bill To _____            Contact: _____            Company: _____            Address: _____            Address: _____            Phone: _____            Fax: _____            PO#/Reference# _____</p>
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## ***Chain of Custody Record***

Lab Job #: 500-45507

**Chain of Custody Number:** \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: 0.5

**Turnaround Time Required (Business Days)**

### Sample Disposal

1 Day    2 Days    5 Days    7 Days    10 Days    15 Days    \_\_\_\_\_ Other     Return to Client     Disposal by Lab     Archive for \_\_\_\_\_ Months    (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date \_\_\_\_\_

Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
<u>h</u>	Cabco	4/16/12	1300	<u>John G</u>	TAC	4/17/12	1420	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
								Fed-X
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

	Matrix Key
WW - Wastewater	SE - Sediment
W - Water	SO - Soil
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking
OL - Oil	O - Other
A - Air	

#### Client Comments

### Lab Comments:

## Login Sample Receipt Checklist

Client: Environmental Information Logistics (EIL)

Job Number: 500-45507-1

**Login Number: 45507**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Lang, Eric A.**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-47604-1

Client Project/Site: Interstate Pollution Control Site

For:

Environmental Information Logistics (EIL)

405 Ritsher Street

Beloit, Wisconsin 53511

Attn: Ms. Mary Pearson



Authorized for release by:

7/6/2012 10:04:14 AM

Richard Wright

Project Manager II

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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results through

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The  
Expert

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[www.testamericainc.com](http://www.testamericainc.com)

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

### Job ID: 500-47604-1

Laboratory: TestAmerica Chicago

#### Narrative

##### Job Narrative 500-47604-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/22/2012 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

#### GC/MS VOA

Method(s) 8260B: The matrix spike duplicate (-1MSD) recovery for Chloroethane was outside control limits. The associated laboratory control sample (LCS) and matrix spike (-1MS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

## Detection Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

### Client Sample ID: IPC-GW-MW6

### Lab Sample ID: 500-47604-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	26		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	11		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	9.4		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	100		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	15		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	44		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	12		5.0	0.17	ug/L	1		8260B	Total/NA

### Client Sample ID: IPC-GW-MW9

### Lab Sample ID: 500-47604-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	11		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	25		5.0	0.12	ug/L	1		8260B	Total/NA

### Client Sample ID: IPC-GW-MW8

### Lab Sample ID: 500-47604-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	9.3		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	20		5.0	0.12	ug/L	1		8260B	Total/NA
Trichloroethene	30		5.0	0.19	ug/L	1		8260B	Total/NA

### Client Sample ID: IPC-GW-MW7

### Lab Sample ID: 500-47604-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	15		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	15		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	13		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	150		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	5.8		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	18		5.0	0.19	ug/L	1		8260B	Total/NA

### Client Sample ID: IPC-GW-MW5

### Lab Sample ID: 500-47604-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4.5		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	16		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	7.1		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	78		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	17		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	130		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	34		5.0	0.17	ug/L	1		8260B	Total/NA

### Client Sample ID: IPC-GW-MW4

### Lab Sample ID: 500-47604-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	56		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	5.6		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	17		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	67		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	12		5.0	0.20	ug/L	1		8260B	Total/NA

### Client Sample ID: IPC-GW-MW3

### Lab Sample ID: 500-47604-7

## Detection Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

### **Client Sample ID: IPC-GW-MW3 (Continued) Lab Sample ID: 500-47604-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	44		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	19		5.0	0.20	ug/L	1		8260B	Total/NA
Tetrachloroethene	41		5.0	0.17	ug/L	1		8260B	Total/NA
Trichloroethene - DL	190		10	0.38	ug/L	2		8260B	Total/NA

### **Client Sample ID: IPC-GW-MW2 Lab Sample ID: 500-47604-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	7.6		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	16		5.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	51		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	15		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	130		5.0	0.19	ug/L	1		8260B	Total/NA
Tetrachloroethene	27		5.0	0.17	ug/L	1		8260B	Total/NA

### **Client Sample ID: IPC-GW-MW1 Lab Sample ID: 500-47604-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	16		2.0	0.10	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	15		5.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	14		5.0	0.19	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	160		5.0	0.12	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	5.9		5.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	17		5.0	0.19	ug/L	1		8260B	Total/NA

### **Client Sample ID: IPC-FB Lab Sample ID: 500-47604-10**

No Detections

### **Client Sample ID: TRIP BLANK Lab Sample ID: 500-47604-11**

No Detections

## Method Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-47604-1	IPC-GW-MW6	Water	06/21/12 10:33	06/22/12 09:10
500-47604-2	IPC-GW-MW9	Water	06/21/12 09:04	06/22/12 09:10
500-47604-3	IPC-GW-MW8	Water	06/21/12 08:43	06/22/12 09:10
500-47604-4	IPC-GW-MW7	Water	06/21/12 09:35	06/22/12 09:10
500-47604-5	IPC-GW-MW5	Water	06/21/12 11:26	06/22/12 09:10
500-47604-6	IPC-GW-MW4	Water	06/21/12 12:15	06/22/12 09:10
500-47604-7	IPC-GW-MW3	Water	06/21/12 12:46	06/22/12 09:10
500-47604-8	IPC-GW-MW2	Water	06/21/12 13:15	06/22/12 09:10
500-47604-9	IPC-GW-MW1	Water	06/21/12 13:36	06/22/12 09:10
500-47604-10	IPC-FB	Water	06/21/12 14:10	06/22/12 09:10
500-47604-11	TRIP BLANK	Water	06/21/12 00:00	06/22/12 09:10

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW6**

**Lab Sample ID: 500-47604-1**

**Matrix: Water**

Date Collected: 06/21/12 10:33

Date Received: 06/22/12 09:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/28/12 23:00	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/28/12 23:00	1
<b>Vinyl chloride</b>	<b>26</b>		2.0	0.10	ug/L			06/28/12 23:00	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/28/12 23:00	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/28/12 23:00	1
<b>1,1-Dichloroethene</b>	<b>11</b>		5.0	0.31	ug/L			06/28/12 23:00	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/28/12 23:00	1
Acetone	<20		20	1.3	ug/L			06/28/12 23:00	1
Methylene Chloride	<10		10	0.68	ug/L			06/28/12 23:00	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/28/12 23:00	1
<b>1,1-Dichloroethane</b>	<b>9.4</b>		5.0	0.19	ug/L			06/28/12 23:00	1
<b>cis-1,2-Dichloroethene</b>	<b>100</b>		5.0	0.12	ug/L			06/28/12 23:00	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/28/12 23:00	1
Chloroform	<5.0		5.0	0.20	ug/L			06/28/12 23:00	1
<b>1,1,1-Trichloroethane</b>	<b>15</b>		5.0	0.20	ug/L			06/28/12 23:00	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/28/12 23:00	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/28/12 23:00	1
<b>Trichloroethene</b>	<b>44</b>		5.0	0.19	ug/L			06/28/12 23:00	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/28/12 23:00	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/28/12 23:00	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/28/12 23:00	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/28/12 23:00	1
Toluene	<5.0		5.0	0.11	ug/L			06/28/12 23:00	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/28/12 23:00	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/28/12 23:00	1
<b>Tetrachloroethene</b>	<b>12</b>		5.0	0.17	ug/L			06/28/12 23:00	1
2-Hexanone	<20		20	0.56	ug/L			06/28/12 23:00	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/28/12 23:00	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/28/12 23:00	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/28/12 23:00	1
Styrene	<5.0		5.0	0.10	ug/L			06/28/12 23:00	1
Bromoform	<5.0		5.0	0.28	ug/L			06/28/12 23:00	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/28/12 23:00	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/28/12 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 131		06/28/12 23:00	1
Toluene-d8 (Surr)	100		80 - 120		06/28/12 23:00	1
4-Bromofluorobenzene (Surr)	93		79 - 120		06/28/12 23:00	1
Dibromofluoromethane	106		74 - 123		06/28/12 23:00	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW9**

**Lab Sample ID: 500-47604-2**

**Matrix: Water**

**Date Collected: 06/21/12 09:04**

**Date Received: 06/22/12 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L		06/28/12 23:24		1
Chloromethane	<5.0		5.0	0.18	ug/L		06/28/12 23:24		1
Vinyl chloride	<2.0		2.0	0.10	ug/L		06/28/12 23:24		1
Bromomethane	<5.0		5.0	0.31	ug/L		06/28/12 23:24		1
Chloroethane	<5.0		5.0	0.34	ug/L		06/28/12 23:24		1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L		06/28/12 23:24		1
Carbon disulfide	<5.0		5.0	0.43	ug/L		06/28/12 23:24		1
Acetone	<20		20	1.3	ug/L		06/28/12 23:24		1
Methylene Chloride	<10		10	0.68	ug/L		06/28/12 23:24		1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L		06/28/12 23:24		1
<b>1,1-Dichloroethane</b>	<b>11</b>		5.0	0.19	ug/L		06/28/12 23:24		1
<b>cis-1,2-Dichloroethene</b>	<b>25</b>		5.0	0.12	ug/L		06/28/12 23:24		1
Methyl Ethyl Ketone	<20		20	1.5	ug/L		06/28/12 23:24		1
Chloroform	<5.0		5.0	0.20	ug/L		06/28/12 23:24		1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L		06/28/12 23:24		1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L		06/28/12 23:24		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		06/28/12 23:24		1
Trichloroethene	<5.0		5.0	0.19	ug/L		06/28/12 23:24		1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L		06/28/12 23:24		1
Bromodichloromethane	<5.0		5.0	0.17	ug/L		06/28/12 23:24		1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L		06/28/12 23:24		1
methyl isobutyl ketone	<20		20	0.33	ug/L		06/28/12 23:24		1
Toluene	<5.0		5.0	0.11	ug/L		06/28/12 23:24		1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L		06/28/12 23:24		1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L		06/28/12 23:24		1
Tetrachloroethene	<5.0		5.0	0.17	ug/L		06/28/12 23:24		1
2-Hexanone	<20		20	0.56	ug/L		06/28/12 23:24		1
Dibromochloromethane	<5.0		5.0	0.32	ug/L		06/28/12 23:24		1
Chlorobenzene	<5.0		5.0	0.14	ug/L		06/28/12 23:24		1
Ethylbenzene	<5.0		5.0	0.13	ug/L		06/28/12 23:24		1
Styrene	<5.0		5.0	0.10	ug/L		06/28/12 23:24		1
Bromoform	<5.0		5.0	0.28	ug/L		06/28/12 23:24		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L		06/28/12 23:24		1
Xylenes, Total	<5.0		5.0	0.068	ug/L		06/28/12 23:24		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		75 - 131		06/28/12 23:24	1
Toluene-d8 (Surr)	102		80 - 120		06/28/12 23:24	1
4-Bromofluorobenzene (Surr)	94		79 - 120		06/28/12 23:24	1
Dibromofluoromethane	109		74 - 123		06/28/12 23:24	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW8**

**Lab Sample ID: 500-47604-3**

**Matrix: Water**

Date Collected: 06/21/12 08:43

Date Received: 06/22/12 09:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/28/12 23:48	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/28/12 23:48	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/28/12 23:48	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/28/12 23:48	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/28/12 23:48	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/28/12 23:48	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/28/12 23:48	1
Acetone	<20		20	1.3	ug/L			06/28/12 23:48	1
Methylene Chloride	<10		10	0.68	ug/L			06/28/12 23:48	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/28/12 23:48	1
<b>1,1-Dichloroethane</b>	<b>9.3</b>		5.0	0.19	ug/L			06/28/12 23:48	1
<b>cis-1,2-Dichloroethene</b>	<b>20</b>		5.0	0.12	ug/L			06/28/12 23:48	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/28/12 23:48	1
Chloroform	<5.0		5.0	0.20	ug/L			06/28/12 23:48	1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L			06/28/12 23:48	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/28/12 23:48	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/28/12 23:48	1
<b>Trichloroethene</b>	<b>30</b>		5.0	0.19	ug/L			06/28/12 23:48	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/28/12 23:48	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/28/12 23:48	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/28/12 23:48	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/28/12 23:48	1
Toluene	<5.0		5.0	0.11	ug/L			06/28/12 23:48	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/28/12 23:48	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/28/12 23:48	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/28/12 23:48	1
2-Hexanone	<20		20	0.56	ug/L			06/28/12 23:48	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/28/12 23:48	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/28/12 23:48	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/28/12 23:48	1
Styrene	<5.0		5.0	0.10	ug/L			06/28/12 23:48	1
Bromoform	<5.0		5.0	0.28	ug/L			06/28/12 23:48	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/28/12 23:48	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/28/12 23:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 131		06/28/12 23:48	1
Toluene-d8 (Surr)	98		80 - 120		06/28/12 23:48	1
4-Bromofluorobenzene (Surr)	91		79 - 120		06/28/12 23:48	1
Dibromofluoromethane	108		74 - 123		06/28/12 23:48	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW7**

**Lab Sample ID: 500-47604-4**

**Matrix: Water**

Date Collected: 06/21/12 09:35

Date Received: 06/22/12 09:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/29/12 12:33	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/29/12 12:33	1
<b>Vinyl chloride</b>	<b>15</b>		2.0	0.10	ug/L			06/29/12 12:33	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/29/12 12:33	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/29/12 12:33	1
<b>1,1-Dichloroethene</b>	<b>15</b>		5.0	0.31	ug/L			06/29/12 12:33	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/29/12 12:33	1
Acetone	<20		20	1.3	ug/L			06/29/12 12:33	1
Methylene Chloride	<10		10	0.68	ug/L			06/29/12 12:33	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/29/12 12:33	1
<b>1,1-Dichloroethane</b>	<b>13</b>		5.0	0.19	ug/L			06/29/12 12:33	1
<b>cis-1,2-Dichloroethene</b>	<b>150</b>		5.0	0.12	ug/L			06/29/12 12:33	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/29/12 12:33	1
Chloroform	<5.0		5.0	0.20	ug/L			06/29/12 12:33	1
<b>1,1,1-Trichloroethane</b>	<b>5.8</b>		5.0	0.20	ug/L			06/29/12 12:33	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/29/12 12:33	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 12:33	1
<b>Trichloroethene</b>	<b>18</b>		5.0	0.19	ug/L			06/29/12 12:33	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/29/12 12:33	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/29/12 12:33	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/29/12 12:33	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/29/12 12:33	1
Toluene	<5.0		5.0	0.11	ug/L			06/29/12 12:33	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/29/12 12:33	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 12:33	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/29/12 12:33	1
2-Hexanone	<20		20	0.56	ug/L			06/29/12 12:33	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/29/12 12:33	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/29/12 12:33	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/29/12 12:33	1
Styrene	<5.0		5.0	0.10	ug/L			06/29/12 12:33	1
Bromoform	<5.0		5.0	0.28	ug/L			06/29/12 12:33	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/29/12 12:33	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/29/12 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 131		06/29/12 12:33	1
Toluene-d8 (Surr)	99		80 - 120		06/29/12 12:33	1
4-Bromofluorobenzene (Surr)	92		79 - 120		06/29/12 12:33	1
Dibromofluoromethane	104		74 - 123		06/29/12 12:33	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW5**

**Lab Sample ID: 500-47604-5**

**Matrix: Water**

Date Collected: 06/21/12 11:26

Date Received: 06/22/12 09:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/29/12 00:37	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/29/12 00:37	1
<b>Vinyl chloride</b>	<b>4.5</b>		2.0	0.10	ug/L			06/29/12 00:37	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/29/12 00:37	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/29/12 00:37	1
<b>1,1-Dichloroethene</b>	<b>16</b>		5.0	0.31	ug/L			06/29/12 00:37	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/29/12 00:37	1
Acetone	<20		20	1.3	ug/L			06/29/12 00:37	1
Methylene Chloride	<10		10	0.68	ug/L			06/29/12 00:37	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/29/12 00:37	1
<b>1,1-Dichloroethane</b>	<b>7.1</b>		5.0	0.19	ug/L			06/29/12 00:37	1
<b>cis-1,2-Dichloroethene</b>	<b>78</b>		5.0	0.12	ug/L			06/29/12 00:37	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/29/12 00:37	1
Chloroform	<5.0		5.0	0.20	ug/L			06/29/12 00:37	1
<b>1,1,1-Trichloroethane</b>	<b>17</b>		5.0	0.20	ug/L			06/29/12 00:37	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/29/12 00:37	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 00:37	1
<b>Trichloroethene</b>	<b>130</b>		5.0	0.19	ug/L			06/29/12 00:37	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/29/12 00:37	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/29/12 00:37	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/29/12 00:37	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/29/12 00:37	1
Toluene	<5.0		5.0	0.11	ug/L			06/29/12 00:37	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/29/12 00:37	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 00:37	1
<b>Tetrachloroethene</b>	<b>34</b>		5.0	0.17	ug/L			06/29/12 00:37	1
2-Hexanone	<20		20	0.56	ug/L			06/29/12 00:37	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/29/12 00:37	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/29/12 00:37	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/29/12 00:37	1
Styrene	<5.0		5.0	0.10	ug/L			06/29/12 00:37	1
Bromoform	<5.0		5.0	0.28	ug/L			06/29/12 00:37	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/29/12 00:37	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/29/12 00:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	111		75 - 131				06/29/12 00:37	1	
Toluene-d8 (Surr)	99		80 - 120				06/29/12 00:37	1	
4-Bromofluorobenzene (Surr)	91		79 - 120				06/29/12 00:37	1	
Dibromofluoromethane	106		74 - 123				06/29/12 00:37	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW4**

**Lab Sample ID: 500-47604-6**

**Matrix: Water**

**Date Collected: 06/21/12 12:15**

**Date Received: 06/22/12 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L		06/29/12 01:01		1
Chloromethane	<5.0		5.0	0.18	ug/L		06/29/12 01:01		1
<b>Vinyl chloride</b>	<b>56</b>		2.0	0.10	ug/L		06/29/12 01:01		1
Bromomethane	<5.0		5.0	0.31	ug/L		06/29/12 01:01		1
Chloroethane	<5.0		5.0	0.34	ug/L		06/29/12 01:01		1
<b>1,1-Dichloroethene</b>	<b>5.6</b>		5.0	0.31	ug/L		06/29/12 01:01		1
Carbon disulfide	<5.0		5.0	0.43	ug/L		06/29/12 01:01		1
Acetone	<20		20	1.3	ug/L		06/29/12 01:01		1
Methylene Chloride	<10		10	0.68	ug/L		06/29/12 01:01		1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L		06/29/12 01:01		1
<b>1,1-Dichloroethane</b>	<b>17</b>		5.0	0.19	ug/L		06/29/12 01:01		1
<b>cis-1,2-Dichloroethene</b>	<b>67</b>		5.0	0.12	ug/L		06/29/12 01:01		1
Methyl Ethyl Ketone	<20		20	1.5	ug/L		06/29/12 01:01		1
Chloroform	<5.0		5.0	0.20	ug/L		06/29/12 01:01		1
<b>1,1,1-Trichloroethane</b>	<b>12</b>		5.0	0.20	ug/L		06/29/12 01:01		1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L		06/29/12 01:01		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		06/29/12 01:01		1
Trichloroethene	<5.0		5.0	0.19	ug/L		06/29/12 01:01		1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L		06/29/12 01:01		1
Bromodichloromethane	<5.0		5.0	0.17	ug/L		06/29/12 01:01		1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L		06/29/12 01:01		1
methyl isobutyl ketone	<20		20	0.33	ug/L		06/29/12 01:01		1
Toluene	<5.0		5.0	0.11	ug/L		06/29/12 01:01		1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L		06/29/12 01:01		1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L		06/29/12 01:01		1
Tetrachloroethene	<5.0		5.0	0.17	ug/L		06/29/12 01:01		1
2-Hexanone	<20		20	0.56	ug/L		06/29/12 01:01		1
Dibromochloromethane	<5.0		5.0	0.32	ug/L		06/29/12 01:01		1
Chlorobenzene	<5.0		5.0	0.14	ug/L		06/29/12 01:01		1
Ethylbenzene	<5.0		5.0	0.13	ug/L		06/29/12 01:01		1
Styrene	<5.0		5.0	0.10	ug/L		06/29/12 01:01		1
Bromoform	<5.0		5.0	0.28	ug/L		06/29/12 01:01		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L		06/29/12 01:01		1
Xylenes, Total	<5.0		5.0	0.068	ug/L		06/29/12 01:01		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	115		75 - 131				06/29/12 01:01		1
Toluene-d8 (Surr)	99		80 - 120				06/29/12 01:01		1
4-Bromofluorobenzene (Surr)	90		79 - 120				06/29/12 01:01		1
Dibromofluoromethane	108		74 - 123				06/29/12 01:01		1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW3**

**Lab Sample ID: 500-47604-7**

**Matrix: Water**

**Date Collected: 06/21/12 12:46**

**Date Received: 06/22/12 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/29/12 01:25	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/29/12 01:25	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/29/12 01:25	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/29/12 01:25	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/29/12 01:25	1
<b>1,1-Dichloroethene</b>	<b>19</b>		5.0	0.31	ug/L			06/29/12 01:25	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/29/12 01:25	1
Acetone	<20		20	1.3	ug/L			06/29/12 01:25	1
Methylene Chloride	<10		10	0.68	ug/L			06/29/12 01:25	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/29/12 01:25	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/29/12 01:25	1
<b>cis-1,2-Dichloroethene</b>	<b>44</b>		5.0	0.12	ug/L			06/29/12 01:25	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/29/12 01:25	1
Chloroform	<5.0		5.0	0.20	ug/L			06/29/12 01:25	1
<b>1,1,1-Trichloroethane</b>	<b>19</b>		5.0	0.20	ug/L			06/29/12 01:25	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/29/12 01:25	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 01:25	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/29/12 01:25	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/29/12 01:25	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/29/12 01:25	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/29/12 01:25	1
Toluene	<5.0		5.0	0.11	ug/L			06/29/12 01:25	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/29/12 01:25	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 01:25	1
<b>Tetrachloroethene</b>	<b>41</b>		5.0	0.17	ug/L			06/29/12 01:25	1
2-Hexanone	<20		20	0.56	ug/L			06/29/12 01:25	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/29/12 01:25	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/29/12 01:25	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/29/12 01:25	1
Styrene	<5.0		5.0	0.10	ug/L			06/29/12 01:25	1
Bromoform	<5.0		5.0	0.28	ug/L			06/29/12 01:25	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/29/12 01:25	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/29/12 01:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	117		75 - 131					06/29/12 01:25	1
Toluene-d8 (Surr)	100		80 - 120					06/29/12 01:25	1
4-Bromofluorobenzene (Surr)	92		79 - 120					06/29/12 01:25	1
Dibromofluoromethane	110		74 - 123					06/29/12 01:25	1

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Trichloroethene</b>	<b>190</b>		10	0.38	ug/L			06/29/12 12:57	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		75 - 131					06/29/12 12:57	2
Toluene-d8 (Surr)	98		80 - 120					06/29/12 12:57	2
4-Bromofluorobenzene (Surr)	88		79 - 120					06/29/12 12:57	2
Dibromofluoromethane	103		74 - 123					06/29/12 12:57	2

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW2**

**Lab Sample ID: 500-47604-8**

**Matrix: Water**

**Date Collected: 06/21/12 13:15**

**Date Received: 06/22/12 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/29/12 01:50	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/29/12 01:50	1
<b>Vinyl chloride</b>	<b>7.6</b>		2.0	0.10	ug/L			06/29/12 01:50	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/29/12 01:50	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/29/12 01:50	1
<b>1,1-Dichloroethene</b>	<b>16</b>		5.0	0.31	ug/L			06/29/12 01:50	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/29/12 01:50	1
Acetone	<20		20	1.3	ug/L			06/29/12 01:50	1
Methylene Chloride	<10		10	0.68	ug/L			06/29/12 01:50	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/29/12 01:50	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/29/12 01:50	1
<b>cis-1,2-Dichloroethene</b>	<b>51</b>		5.0	0.12	ug/L			06/29/12 01:50	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/29/12 01:50	1
Chloroform	<5.0		5.0	0.20	ug/L			06/29/12 01:50	1
<b>1,1,1-Trichloroethane</b>	<b>15</b>		5.0	0.20	ug/L			06/29/12 01:50	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/29/12 01:50	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 01:50	1
<b>Trichloroethene</b>	<b>130</b>		5.0	0.19	ug/L			06/29/12 01:50	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/29/12 01:50	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/29/12 01:50	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/29/12 01:50	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/29/12 01:50	1
Toluene	<5.0		5.0	0.11	ug/L			06/29/12 01:50	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/29/12 01:50	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 01:50	1
<b>Tetrachloroethene</b>	<b>27</b>		5.0	0.17	ug/L			06/29/12 01:50	1
2-Hexanone	<20		20	0.56	ug/L			06/29/12 01:50	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/29/12 01:50	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/29/12 01:50	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/29/12 01:50	1
Styrene	<5.0		5.0	0.10	ug/L			06/29/12 01:50	1
Bromoform	<5.0		5.0	0.28	ug/L			06/29/12 01:50	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/29/12 01:50	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/29/12 01:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	115		75 - 131				06/29/12 01:50	1	
Toluene-d8 (Surr)	99		80 - 120				06/29/12 01:50	1	
4-Bromofluorobenzene (Surr)	89		79 - 120				06/29/12 01:50	1	
Dibromofluoromethane	111		74 - 123				06/29/12 01:50	1	

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW1**

**Lab Sample ID: 500-47604-9**

**Matrix: Water**

Date Collected: 06/21/12 13:36

Date Received: 06/22/12 09:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L			06/29/12 02:14	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/29/12 02:14	1
<b>Vinyl chloride</b>	<b>16</b>		2.0	0.10	ug/L			06/29/12 02:14	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/29/12 02:14	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/29/12 02:14	1
<b>1,1-Dichloroethene</b>	<b>15</b>		5.0	0.31	ug/L			06/29/12 02:14	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/29/12 02:14	1
Acetone	<20		20	1.3	ug/L			06/29/12 02:14	1
Methylene Chloride	<10		10	0.68	ug/L			06/29/12 02:14	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/29/12 02:14	1
<b>1,1-Dichloroethane</b>	<b>14</b>		5.0	0.19	ug/L			06/29/12 02:14	1
<b>cis-1,2-Dichloroethene</b>	<b>160</b>		5.0	0.12	ug/L			06/29/12 02:14	1
Methyl Ethyl Ketone	<20		20	1.5	ug/L			06/29/12 02:14	1
Chloroform	<5.0		5.0	0.20	ug/L			06/29/12 02:14	1
<b>1,1,1-Trichloroethane</b>	<b>5.9</b>		5.0	0.20	ug/L			06/29/12 02:14	1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L			06/29/12 02:14	1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 02:14	1
<b>Trichloroethene</b>	<b>17</b>		5.0	0.19	ug/L			06/29/12 02:14	1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L			06/29/12 02:14	1
Bromodichloromethane	<5.0		5.0	0.17	ug/L			06/29/12 02:14	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L			06/29/12 02:14	1
methyl isobutyl ketone	<20		20	0.33	ug/L			06/29/12 02:14	1
Toluene	<5.0		5.0	0.11	ug/L			06/29/12 02:14	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L			06/29/12 02:14	1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L			06/29/12 02:14	1
Tetrachloroethene	<5.0		5.0	0.17	ug/L			06/29/12 02:14	1
2-Hexanone	<20		20	0.56	ug/L			06/29/12 02:14	1
Dibromochloromethane	<5.0		5.0	0.32	ug/L			06/29/12 02:14	1
Chlorobenzene	<5.0		5.0	0.14	ug/L			06/29/12 02:14	1
Ethylbenzene	<5.0		5.0	0.13	ug/L			06/29/12 02:14	1
Styrene	<5.0		5.0	0.10	ug/L			06/29/12 02:14	1
Bromoform	<5.0		5.0	0.28	ug/L			06/29/12 02:14	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L			06/29/12 02:14	1
Xylenes, Total	<5.0		5.0	0.068	ug/L			06/29/12 02:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		75 - 131		06/29/12 02:14	1
Toluene-d8 (Surr)	100		80 - 120		06/29/12 02:14	1
4-Bromofluorobenzene (Surr)	92		79 - 120		06/29/12 02:14	1
Dibromofluoromethane	111		74 - 123		06/29/12 02:14	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-FB**

**Date Collected: 06/21/12 14:10**

**Date Received: 06/22/12 09:10**

**Lab Sample ID: 500-47604-10**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L		06/29/12 02:38		1
Chloromethane	<5.0		5.0	0.18	ug/L		06/29/12 02:38		1
Vinyl chloride	<2.0		2.0	0.10	ug/L		06/29/12 02:38		1
Bromomethane	<5.0		5.0	0.31	ug/L		06/29/12 02:38		1
Chloroethane	<5.0		5.0	0.34	ug/L		06/29/12 02:38		1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L		06/29/12 02:38		1
Carbon disulfide	<5.0		5.0	0.43	ug/L		06/29/12 02:38		1
Acetone	<20		20	1.3	ug/L		06/29/12 02:38		1
Methylene Chloride	<10		10	0.68	ug/L		06/29/12 02:38		1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L		06/29/12 02:38		1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L		06/29/12 02:38		1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L		06/29/12 02:38		1
Methyl Ethyl Ketone	<20		20	1.5	ug/L		06/29/12 02:38		1
Chloroform	<5.0		5.0	0.20	ug/L		06/29/12 02:38		1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L		06/29/12 02:38		1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L		06/29/12 02:38		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		06/29/12 02:38		1
Trichloroethene	<5.0		5.0	0.19	ug/L		06/29/12 02:38		1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L		06/29/12 02:38		1
Bromodichloromethane	<5.0		5.0	0.17	ug/L		06/29/12 02:38		1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L		06/29/12 02:38		1
methyl isobutyl ketone	<20		20	0.33	ug/L		06/29/12 02:38		1
Toluene	<5.0		5.0	0.11	ug/L		06/29/12 02:38		1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L		06/29/12 02:38		1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L		06/29/12 02:38		1
Tetrachloroethene	<5.0		5.0	0.17	ug/L		06/29/12 02:38		1
2-Hexanone	<20		20	0.56	ug/L		06/29/12 02:38		1
Dibromochloromethane	<5.0		5.0	0.32	ug/L		06/29/12 02:38		1
Chlorobenzene	<5.0		5.0	0.14	ug/L		06/29/12 02:38		1
Ethylbenzene	<5.0		5.0	0.13	ug/L		06/29/12 02:38		1
Styrene	<5.0		5.0	0.10	ug/L		06/29/12 02:38		1
Bromoform	<5.0		5.0	0.28	ug/L		06/29/12 02:38		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L		06/29/12 02:38		1
Xylenes, Total	<5.0		5.0	0.068	ug/L		06/29/12 02:38		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		75 - 131		06/29/12 02:38	1
Toluene-d8 (Surr)	100		80 - 120		06/29/12 02:38	1
4-Bromofluorobenzene (Surr)	93		79 - 120		06/29/12 02:38	1
Dibromofluoromethane	110		74 - 123		06/29/12 02:38	1

# Client Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: TRIP BLANK**

Date Collected: 06/21/12 00:00

Date Received: 06/22/12 09:10

**Lab Sample ID: 500-47604-11**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	0.074	ug/L		06/29/12 03:02		1
Chloromethane	<5.0		5.0	0.18	ug/L		06/29/12 03:02		1
Vinyl chloride	<2.0		2.0	0.10	ug/L		06/29/12 03:02		1
Bromomethane	<5.0		5.0	0.31	ug/L		06/29/12 03:02		1
Chloroethane	<5.0		5.0	0.34	ug/L		06/29/12 03:02		1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L		06/29/12 03:02		1
Carbon disulfide	<5.0		5.0	0.43	ug/L		06/29/12 03:02		1
Acetone	<20		20	1.3	ug/L		06/29/12 03:02		1
Methylene Chloride	<10		10	0.68	ug/L		06/29/12 03:02		1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L		06/29/12 03:02		1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L		06/29/12 03:02		1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L		06/29/12 03:02		1
Methyl Ethyl Ketone	<20		20	1.5	ug/L		06/29/12 03:02		1
Chloroform	<5.0		5.0	0.20	ug/L		06/29/12 03:02		1
1,1,1-Trichloroethane	<5.0		5.0	0.20	ug/L		06/29/12 03:02		1
Carbon tetrachloride	<5.0		5.0	0.26	ug/L		06/29/12 03:02		1
1,2-Dichloroethane	<5.0		5.0	0.28	ug/L		06/29/12 03:02		1
Trichloroethene	<5.0		5.0	0.19	ug/L		06/29/12 03:02		1
1,2-Dichloropropane	<5.0		5.0	0.20	ug/L		06/29/12 03:02		1
Bromodichloromethane	<5.0		5.0	0.17	ug/L		06/29/12 03:02		1
cis-1,3-Dichloropropene	<5.0		5.0	0.18	ug/L		06/29/12 03:02		1
methyl isobutyl ketone	<20		20	0.33	ug/L		06/29/12 03:02		1
Toluene	<5.0		5.0	0.11	ug/L		06/29/12 03:02		1
trans-1,3-Dichloropropene	<5.0		5.0	0.21	ug/L		06/29/12 03:02		1
1,1,2-Trichloroethane	<5.0		5.0	0.28	ug/L		06/29/12 03:02		1
Tetrachloroethene	<5.0		5.0	0.17	ug/L		06/29/12 03:02		1
2-Hexanone	<20		20	0.56	ug/L		06/29/12 03:02		1
Dibromochloromethane	<5.0		5.0	0.32	ug/L		06/29/12 03:02		1
Chlorobenzene	<5.0		5.0	0.14	ug/L		06/29/12 03:02		1
Ethylbenzene	<5.0		5.0	0.13	ug/L		06/29/12 03:02		1
Styrene	<5.0		5.0	0.10	ug/L		06/29/12 03:02		1
Bromoform	<5.0		5.0	0.28	ug/L		06/29/12 03:02		1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23	ug/L		06/29/12 03:02		1
Xylenes, Total	<5.0		5.0	0.068	ug/L		06/29/12 03:02		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		75 - 131		06/29/12 03:02	1
Toluene-d8 (Surr)	100		80 - 120		06/29/12 03:02	1
4-Bromofluorobenzene (Surr)	92		79 - 120		06/29/12 03:02	1
Dibromofluoromethane	110		74 - 123		06/29/12 03:02	1

## Definitions/Glossary

Client: Environmental Information Logistics (EIL)

Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

☀	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## GC/MS VOA

### Analysis Batch: 154471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-47604-1	IPC-GW-MW6	Total/NA	Water	8260B	1
500-47604-1 MS	IPC-GW-MW6	Total/NA	Water	8260B	2
500-47604-1 MSD	IPC-GW-MW6	Total/NA	Water	8260B	3
500-47604-2	IPC-GW-MW9	Total/NA	Water	8260B	4
500-47604-3	IPC-GW-MW8	Total/NA	Water	8260B	5
500-47604-5	IPC-GW-MW5	Total/NA	Water	8260B	6
500-47604-6	IPC-GW-MW4	Total/NA	Water	8260B	7
500-47604-7	IPC-GW-MW3	Total/NA	Water	8260B	8
500-47604-8	IPC-GW-MW2	Total/NA	Water	8260B	9
500-47604-9	IPC-GW-MW1	Total/NA	Water	8260B	10
500-47604-10	IPC-FB	Total/NA	Water	8260B	11
500-47604-11	TRIP BLANK	Total/NA	Water	8260B	12
LCS 500-154471/4	Lab Control Sample	Total/NA	Water	8260B	13
MB 500-154471/5	Method Blank	Total/NA	Water	8260B	14

### Analysis Batch: 154568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-47604-4	IPC-GW-MW7	Total/NA	Water	8260B	13
500-47604-7 - DL	IPC-GW-MW3	Total/NA	Water	8260B	14
LCS 500-154568/4	Lab Control Sample	Total/NA	Water	8260B	15
MB 500-154568/5	Method Blank	Total/NA	Water	8260B	

# Surrogate Summary

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-131)	TOL (80-120)	BFB (79-120)	DBFM (74-123)
500-47604-1	IPC-GW-MW6	112	100	93	106
500-47604-1 MS	IPC-GW-MW6	110	102	95	107
500-47604-1 MSD	IPC-GW-MW6	106	101	95	103
500-47604-2	IPC-GW-MW9	115	102	94	109
500-47604-3	IPC-GW-MW8	114	98	91	108
500-47604-4	IPC-GW-MW7	108	99	92	104
500-47604-5	IPC-GW-MW5	111	99	91	106
500-47604-6	IPC-GW-MW4	115	99	90	108
500-47604-7	IPC-GW-MW3	117	100	92	110
500-47604-7 - DL	IPC-GW-MW3	108	98	88	103
500-47604-8	IPC-GW-MW2	115	99	89	111
500-47604-9	IPC-GW-MW1	116	100	92	111
500-47604-10	IPC-FB	115	100	93	110
500-47604-11	TRIP BLANK	115	100	92	110
LCS 500-154471/4	Lab Control Sample	114	101	97	107
LCS 500-154568/4	Lab Control Sample	107	99	91	98
MB 500-154471/5	Method Blank	109	100	93	104
MB 500-154568/5	Method Blank	106	97	87	102

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID:** MB 500-154471/5

**Matrix:** Water

**Analysis Batch:** 154471

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier				
Benzene	<5.0		5.0	0.074 ug/L	06/28/12 22:12	1
Chloromethane	<5.0		5.0	0.18 ug/L	06/28/12 22:12	1
Vinyl chloride	<2.0		2.0	0.10 ug/L	06/28/12 22:12	1
Bromomethane	<5.0		5.0	0.31 ug/L	06/28/12 22:12	1
Chloroethane	<5.0		5.0	0.34 ug/L	06/28/12 22:12	1
1,1-Dichloroethene	<5.0		5.0	0.31 ug/L	06/28/12 22:12	1
Carbon disulfide	<5.0		5.0	0.43 ug/L	06/28/12 22:12	1
Acetone	<20		20	1.3 ug/L	06/28/12 22:12	1
Methylene Chloride	<10		10	0.68 ug/L	06/28/12 22:12	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25 ug/L	06/28/12 22:12	1
1,1-Dichloroethane	<5.0		5.0	0.19 ug/L	06/28/12 22:12	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12 ug/L	06/28/12 22:12	1
Methyl Ethyl Ketone	<20		20	1.5 ug/L	06/28/12 22:12	1
Chloroform	<5.0		5.0	0.20 ug/L	06/28/12 22:12	1
1,1,1-Trichloroethane	<5.0		5.0	0.20 ug/L	06/28/12 22:12	1
Carbon tetrachloride	<5.0		5.0	0.26 ug/L	06/28/12 22:12	1
1,2-Dichloroethane	<5.0		5.0	0.28 ug/L	06/28/12 22:12	1
Trichloroethene	<5.0		5.0	0.19 ug/L	06/28/12 22:12	1
1,2-Dichloropropane	<5.0		5.0	0.20 ug/L	06/28/12 22:12	1
Bromodichloromethane	<5.0		5.0	0.17 ug/L	06/28/12 22:12	1
cis-1,3-Dichloropropene	<5.0		5.0	0.18 ug/L	06/28/12 22:12	1
methyl isobutyl ketone	<20		20	0.33 ug/L	06/28/12 22:12	1
Toluene	<5.0		5.0	0.11 ug/L	06/28/12 22:12	1
trans-1,3-Dichloropropene	<5.0		5.0	0.21 ug/L	06/28/12 22:12	1
1,1,2-Trichloroethane	<5.0		5.0	0.28 ug/L	06/28/12 22:12	1
Tetrachloroethene	<5.0		5.0	0.17 ug/L	06/28/12 22:12	1
2-Hexanone	<20		20	0.56 ug/L	06/28/12 22:12	1
Dibromochloromethane	<5.0		5.0	0.32 ug/L	06/28/12 22:12	1
Chlorobenzene	<5.0		5.0	0.14 ug/L	06/28/12 22:12	1
Ethylbenzene	<5.0		5.0	0.13 ug/L	06/28/12 22:12	1
Styrene	<5.0		5.0	0.10 ug/L	06/28/12 22:12	1
Bromoform	<5.0		5.0	0.28 ug/L	06/28/12 22:12	1
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.23 ug/L	06/28/12 22:12	1
Xylenes, Total	<5.0		5.0	0.068 ug/L	06/28/12 22:12	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	109		75 - 131		06/28/12 22:12	1
Toluene-d8 (Surr)	100		80 - 120		06/28/12 22:12	1
4-Bromofluorobenzene (Surr)	93		79 - 120		06/28/12 22:12	1
Dibromofluoromethane	104		74 - 123		06/28/12 22:12	1

**Lab Sample ID:** LCS 500-154471/4

**Matrix:** Water

**Analysis Batch:** 154471

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Benzene	50.0	50.7		ug/L	101	74 - 115
Chloromethane	50.0	72.0		ug/L	144	56 - 144
Vinyl chloride	50.0	70.7		ug/L	141	51 - 149

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-154471/4**

**Matrix: Water**

**Analysis Batch: 154471**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromomethane	50.0	63.7		ug/L		127	47 - 158
Chloroethane	50.0	45.3		ug/L		91	54 - 143
1,1-Dichloroethene	50.0	52.1		ug/L		104	58 - 115
Carbon disulfide	50.0	44.4		ug/L		89	50 - 120
Acetone	50.0	70.3		ug/L		141	41 - 163
Methylene Chloride	50.0	53.3		ug/L		107	63 - 130
trans-1,2-Dichloroethene	50.0	53.2		ug/L		106	74 - 119
1,1-Dichloroethane	50.0	55.2		ug/L		110	66 - 118
cis-1,2-Dichloroethene	50.0	52.6		ug/L		105	75 - 119
Methyl Ethyl Ketone	50.0	69.5		ug/L		139	53 - 140
Chloroform	50.0	52.6		ug/L		105	76 - 117
1,1,1-Trichloroethane	50.0	54.1		ug/L		108	77 - 117
Carbon tetrachloride	50.0	49.7		ug/L		99	72 - 124
1,2-Dichloroethane	50.0	57.0		ug/L		114	76 - 117
Trichloroethene	50.0	49.2		ug/L		98	75 - 120
1,2-Dichloropropane	50.0	54.2		ug/L		108	77 - 118
Bromodichloromethane	50.0	50.6		ug/L		101	79 - 117
cis-1,3-Dichloropropene	53.8	51.3		ug/L		96	71 - 112
methyl isobutyl ketone	50.0	61.1		ug/L		122	59 - 134
Toluene	50.0	50.7		ug/L		101	80 - 120
trans-1,3-Dichloropropene	48.6	47.8		ug/L		98	66 - 116
1,1,2-Trichloroethane	50.0	53.9		ug/L		108	78 - 121
Tetrachloroethene	50.0	47.6		ug/L		95	71 - 120
2-Hexanone	50.0	62.6		ug/L		125	60 - 134
Dibromochloromethane	50.0	52.6		ug/L		105	73 - 120
Chlorobenzene	50.0	49.4		ug/L		99	80 - 120
Ethylbenzene	50.0	49.5		ug/L		99	79 - 115
Styrene	50.0	50.6		ug/L		101	80 - 120
Bromoform	50.0	54.4		ug/L		109	64 - 127
1,1,2,2-Tetrachloroethane	50.0	58.4		ug/L		117	78 - 123
Xylenes, Total	150	149		ug/L		99	78 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	114		75 - 131
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	97		79 - 120
Dibromofluoromethane	107		74 - 123

**Lab Sample ID: 500-47604-1 MS**

**Matrix: Water**

**Analysis Batch: 154471**

**Client Sample ID: IPC-GW-MW6**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<5.0		50.0	50.3		ug/L		101	74 - 115
Chloromethane	<5.0		50.0	67.0		ug/L		134	56 - 144
Vinyl chloride	26		50.0	98.5		ug/L		145	51 - 149
Bromomethane	<5.0		50.0	65.6		ug/L		131	47 - 158
Chloroethane	<5.0		50.0	55.0		ug/L		110	54 - 143
1,1-Dichloroethene	11		50.0	58.4		ug/L		95	58 - 115

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-47604-1 MS**

**Matrix: Water**

**Analysis Batch: 154471**

**Client Sample ID: IPC-GW-MW6**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Carbon disulfide	<5.0		50.0	43.3		ug/L		87	50 - 120
Acetone	<20		50.0	50.5		ug/L		101	41 - 163
Methylene Chloride	<10		50.0	51.9		ug/L		104	63 - 130
trans-1,2-Dichloroethene	<5.0		50.0	52.8		ug/L		103	74 - 119
1,1-Dichloroethane	9.4		50.0	63.3		ug/L		108	66 - 118
cis-1,2-Dichloroethene	100		50.0	152		ug/L		99	75 - 119
Methyl Ethyl Ketone	<20		50.0	50.5		ug/L		101	53 - 140
Chloroform	<5.0		50.0	52.4		ug/L		105	76 - 117
1,1,1-Trichloroethane	15		50.0	67.5		ug/L		105	77 - 117
Carbon tetrachloride	<5.0		50.0	50.4		ug/L		101	72 - 124
1,2-Dichloroethane	<5.0		50.0	53.5		ug/L		107	76 - 117
Trichloroethene	44		50.0	92.8		ug/L		97	75 - 120
1,2-Dichloropropane	<5.0		50.0	53.8		ug/L		108	77 - 118
Bromodichloromethane	<5.0		50.0	49.2		ug/L		98	79 - 117
cis-1,3-Dichloropropene	<5.0		53.8	47.2		ug/L		88	71 - 112
methyl isobutyl ketone	<20		50.0	52.2		ug/L		104	59 - 134
Toluene	<5.0		50.0	51.2		ug/L		102	80 - 120
trans-1,3-Dichloropropene	<5.0		48.6	43.9		ug/L		90	66 - 116
1,1,2-Trichloroethane	<5.0		50.0	50.9		ug/L		102	78 - 121
Tetrachloroethene	12		50.0	57.3		ug/L		90	71 - 120
2-Hexanone	<20		50.0	53.8		ug/L		108	60 - 134
Dibromochloromethane	<5.0		50.0	49.1		ug/L		98	73 - 120
Chlorobenzene	<5.0		50.0	48.0		ug/L		96	80 - 120
Ethylbenzene	<5.0		50.0	48.5		ug/L		97	79 - 115
Styrene	<5.0		50.0	48.4		ug/L		97	80 - 120
Bromoform	<5.0		50.0	50.2		ug/L		100	64 - 127
1,1,2,2-Tetrachloroethane	<5.0		50.0	52.9		ug/L		106	78 - 123
Xylenes, Total	<5.0		150	147		ug/L		98	78 - 120

### MS MS

Surrogate	MS	MS	Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110					75 - 131
Toluene-d8 (Surr)	102					80 - 120
4-Bromofluorobenzene (Surr)	95					79 - 120
Dibromofluoromethane	107					74 - 123

**Lab Sample ID: 500-47604-1 MSD**

**Matrix: Water**

**Analysis Batch: 154471**

**Client Sample ID: IPC-GW-MW6**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<5.0		50.0	49.0		ug/L		98	74 - 115	3	20
Chloromethane	<5.0		50.0	74.3	F	ug/L		149	56 - 144	10	20
Vinyl chloride	26		50.0	95.7		ug/L		140	51 - 149	3	20
Bromomethane	<5.0		50.0	65.9		ug/L		132	47 - 158	0	20
Chloroethane	<5.0		50.0	54.2		ug/L		108	54 - 143	1	20
1,1-Dichloroethene	11		50.0	56.6		ug/L		92	58 - 115	3	20
Carbon disulfide	<5.0		50.0	41.5		ug/L		83	50 - 120	4	20
Acetone	<20		50.0	46.3		ug/L		93	41 - 163	9	20
Methylene Chloride	<10		50.0	49.3		ug/L		99	63 - 130	5	20

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-47604-1 MSD**

**Matrix: Water**

**Analysis Batch: 154471**

**Client Sample ID: IPC-GW-MW6**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
trans-1,2-Dichloroethene	<5.0		50.0	52.1		ug/L		101	74 - 119	1	20
1,1-Dichloroethane	9.4		50.0	61.0		ug/L		103	66 - 118	4	20
cis-1,2-Dichloroethene	100		50.0	148		ug/L		92	75 - 119	2	20
Methyl Ethyl Ketone	<20		50.0	53.3		ug/L		107	53 - 140	5	20
Chloroform	<5.0		50.0	49.9		ug/L		100	76 - 117	5	20
1,1,1-Trichloroethane	15		50.0	65.6		ug/L		101	77 - 117	3	20
Carbon tetrachloride	<5.0		50.0	49.1		ug/L		98	72 - 124	3	20
1,2-Dichloroethane	<5.0		50.0	51.6		ug/L		103	76 - 117	4	20
Trichloroethene	44		50.0	91.8		ug/L		95	75 - 120	1	20
1,2-Dichloropropane	<5.0		50.0	51.9		ug/L		104	77 - 118	4	20
Bromodichloromethane	<5.0		50.0	47.5		ug/L		95	79 - 117	4	20
cis-1,3-Dichloropropene	<5.0		53.8	45.8		ug/L		85	71 - 112	3	20
methyl isobutyl ketone	<20		50.0	49.3		ug/L		99	59 - 134	6	20
Toluene	<5.0		50.0	49.1		ug/L		98	80 - 120	4	20
trans-1,3-Dichloropropene	<5.0		48.6	41.5		ug/L		85	66 - 116	6	20
1,1,2-Trichloroethane	<5.0		50.0	47.2		ug/L		94	78 - 121	8	20
Tetrachloroethene	12		50.0	58.2		ug/L		92	71 - 120	2	20
2-Hexanone	<20		50.0	50.9		ug/L		102	60 - 134	6	20
Dibromochloromethane	<5.0		50.0	47.7		ug/L		95	73 - 120	3	20
Chlorobenzene	<5.0		50.0	47.7		ug/L		95	80 - 120	1	20
Ethylbenzene	<5.0		50.0	47.8		ug/L		96	79 - 115	1	20
Styrene	<5.0		50.0	47.7		ug/L		95	80 - 120	1	20
Bromoform	<5.0		50.0	49.0		ug/L		98	64 - 127	2	20
1,1,2,2-Tetrachloroethane	<5.0		50.0	51.4		ug/L		103	78 - 123	3	20
Xylenes, Total	<5.0		150	145		ug/L		97	78 - 120	1	20

**MSD MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	106		75 - 131
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	95		79 - 120
Dibromofluoromethane	103		74 - 123

**Lab Sample ID: MB 500-154568/5**

**Matrix: Water**

**Analysis Batch: 154568**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<5.0		5.0	0.074	ug/L			06/29/12 10:33	1
Chloromethane	<5.0		5.0	0.18	ug/L			06/29/12 10:33	1
Vinyl chloride	<2.0		2.0	0.10	ug/L			06/29/12 10:33	1
Bromomethane	<5.0		5.0	0.31	ug/L			06/29/12 10:33	1
Chloroethane	<5.0		5.0	0.34	ug/L			06/29/12 10:33	1
1,1-Dichloroethene	<5.0		5.0	0.31	ug/L			06/29/12 10:33	1
Carbon disulfide	<5.0		5.0	0.43	ug/L			06/29/12 10:33	1
Acetone	<20		20	1.3	ug/L			06/29/12 10:33	1
Methylene Chloride	<10		10	0.68	ug/L			06/29/12 10:33	1
trans-1,2-Dichloroethene	<5.0		5.0	0.25	ug/L			06/29/12 10:33	1
1,1-Dichloroethane	<5.0		5.0	0.19	ug/L			06/29/12 10:33	1
cis-1,2-Dichloroethene	<5.0		5.0	0.12	ug/L			06/29/12 10:33	1

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 500-154568/5**

**Matrix: Water**

**Analysis Batch: 154568**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Methyl Ethyl Ketone	<20				20	1.5	ug/L			06/29/12 10:33	1
Chloroform	<5.0				5.0	0.20	ug/L			06/29/12 10:33	1
1,1,1-Trichloroethane	<5.0				5.0	0.20	ug/L			06/29/12 10:33	1
Carbon tetrachloride	<5.0				5.0	0.26	ug/L			06/29/12 10:33	1
1,2-Dichloroethane	<5.0				5.0	0.28	ug/L			06/29/12 10:33	1
Trichloroethylene	<5.0				5.0	0.19	ug/L			06/29/12 10:33	1
1,2-Dichloropropane	<5.0				5.0	0.20	ug/L			06/29/12 10:33	1
Bromodichloromethane	<5.0				5.0	0.17	ug/L			06/29/12 10:33	1
cis-1,3-Dichloropropene	<5.0				5.0	0.18	ug/L			06/29/12 10:33	1
methyl isobutyl ketone	<20				20	0.33	ug/L			06/29/12 10:33	1
Toluene	<5.0				5.0	0.11	ug/L			06/29/12 10:33	1
trans-1,3-Dichloropropene	<5.0				5.0	0.21	ug/L			06/29/12 10:33	1
1,1,2-Trichloroethane	<5.0				5.0	0.28	ug/L			06/29/12 10:33	1
Tetrachloroethylene	<5.0				5.0	0.17	ug/L			06/29/12 10:33	1
2-Hexanone	<20				20	0.56	ug/L			06/29/12 10:33	1
Dibromochloromethane	<5.0				5.0	0.32	ug/L			06/29/12 10:33	1
Chlorobenzene	<5.0				5.0	0.14	ug/L			06/29/12 10:33	1
Ethylbenzene	<5.0				5.0	0.13	ug/L			06/29/12 10:33	1
Styrene	<5.0				5.0	0.10	ug/L			06/29/12 10:33	1
Bromoform	<5.0				5.0	0.28	ug/L			06/29/12 10:33	1
1,1,2,2-Tetrachloroethane	<5.0				5.0	0.23	ug/L			06/29/12 10:33	1
Xylenes, Total	<5.0				5.0	0.068	ug/L			06/29/12 10:33	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	106		106		75 - 131			1
Toluene-d8 (Surr)	97		97		80 - 120			1
4-Bromofluorobenzene (Surr)	87		87		79 - 120			1
Dibromofluoromethane	102		102		74 - 123			1

**Lab Sample ID: LCS 500-154568/4**

**Matrix: Water**

**Analysis Batch: 154568**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Benzene	50.0	47.5		ug/L		95	74 - 115
Chloromethane	50.0	62.7		ug/L		125	56 - 144
Vinyl chloride	50.0	63.1		ug/L		126	51 - 149
Bromomethane	50.0	49.3		ug/L		99	47 - 158
Chloroethane	50.0	60.4		ug/L		121	54 - 143
1,1-Dichloroethene	50.0	45.8		ug/L		92	58 - 115
Carbon disulfide	50.0	38.9		ug/L		78	50 - 120
Acetone	50.0	56.8		ug/L		114	41 - 163
Methylene Chloride	50.0	46.9		ug/L		94	63 - 130
trans-1,2-Dichloroethene	50.0	48.1		ug/L		96	74 - 119
1,1-Dichloroethane	50.0	49.3		ug/L		99	66 - 118
cis-1,2-Dichloroethene	50.0	47.1		ug/L		94	75 - 119
Methyl Ethyl Ketone	50.0	49.8		ug/L		100	53 - 140
Chloroform	50.0	46.6		ug/L		93	76 - 117
1,1,1-Trichloroethane	50.0	48.7		ug/L		97	77 - 117

# QC Sample Results

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-154568/4**

**Matrix: Water**

**Analysis Batch: 154568**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
Carbon tetrachloride	50.0	45.9		ug/L		92	72 - 124
1,2-Dichloroethane	50.0	49.3		ug/L		99	76 - 117
Trichloroethene	50.0	46.7		ug/L		93	75 - 120
1,2-Dichloropropane	50.0	50.0		ug/L		100	77 - 118
Bromodichloromethane	50.0	45.4		ug/L		91	79 - 117
cis-1,3-Dichloropropene	53.8	46.8		ug/L		87	71 - 112
methyl isobutyl ketone	50.0	47.9		ug/L		96	59 - 134
Toluene	50.0	46.9		ug/L		94	80 - 120
trans-1,3-Dichloropropene	48.6	42.5		ug/L		87	66 - 116
1,1,2-Trichloroethane	50.0	44.1		ug/L		88	78 - 121
Tetrachloroethene	50.0	44.6		ug/L		89	71 - 120
2-Hexanone	50.0	48.5		ug/L		97	60 - 134
Dibromochloromethane	50.0	45.0		ug/L		90	73 - 120
Chlorobenzene	50.0	45.5		ug/L		91	80 - 120
Ethylbenzene	50.0	46.1		ug/L		92	79 - 115
Styrene	50.0	46.1		ug/L		92	80 - 120
Bromoform	50.0	45.4		ug/L		91	64 - 127
1,1,2,2-Tetrachloroethane	50.0	47.2		ug/L		94	78 - 123
Xylenes, Total	150	140		ug/L		93	78 - 120

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surf)	107		75 - 131
Toluene-d8 (Surf)	99		80 - 120
4-Bromofluorobenzene (Surf)	91		79 - 120
Dibromofluoromethane	98		74 - 123

## Lab Chronicle

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

**Client Sample ID: IPC-GW-MW6**

**Lab Sample ID: 500-47604-1**

Matrix: Water

Date Collected: 06/21/12 10:33

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/28/12 23:00	BDA	TAL CHI

**Client Sample ID: IPC-GW-MW9**

**Lab Sample ID: 500-47604-2**

Matrix: Water

Date Collected: 06/21/12 09:04

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/28/12 23:24	BDA	TAL CHI

**Client Sample ID: IPC-GW-MW8**

**Lab Sample ID: 500-47604-3**

Matrix: Water

Date Collected: 06/21/12 08:43

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/28/12 23:48	BDA	TAL CHI

**Client Sample ID: IPC-GW-MW7**

**Lab Sample ID: 500-47604-4**

Matrix: Water

Date Collected: 06/21/12 09:35

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154568	06/29/12 12:33	EA	TAL CHI

**Client Sample ID: IPC-GW-MW5**

**Lab Sample ID: 500-47604-5**

Matrix: Water

Date Collected: 06/21/12 11:26

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 00:37	BDA	TAL CHI

**Client Sample ID: IPC-GW-MW4**

**Lab Sample ID: 500-47604-6**

Matrix: Water

Date Collected: 06/21/12 12:15

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 01:01	BDA	TAL CHI

**Client Sample ID: IPC-GW-MW3**

**Lab Sample ID: 500-47604-7**

Matrix: Water

Date Collected: 06/21/12 12:46

Date Received: 06/22/12 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 01:25	BDA	TAL CHI

## Lab Chronicle

Client: Environmental Information Logistics (EIL)  
Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

### Client Sample ID: IPC-GW-MW3

Date Collected: 06/21/12 12:46  
Date Received: 06/22/12 09:10

### Lab Sample ID: 500-47604-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	2	154568	06/29/12 12:57	EA	TAL CHI

### Client Sample ID: IPC-GW-MW2

Date Collected: 06/21/12 13:15  
Date Received: 06/22/12 09:10

### Lab Sample ID: 500-47604-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 01:50	BDA	TAL CHI

### Client Sample ID: IPC-GW-MW1

Date Collected: 06/21/12 13:36  
Date Received: 06/22/12 09:10

### Lab Sample ID: 500-47604-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 02:14	BDA	TAL CHI

### Client Sample ID: IPC-FB

Date Collected: 06/21/12 14:10  
Date Received: 06/22/12 09:10

### Lab Sample ID: 500-47604-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 02:38	BDA	TAL CHI

### Client Sample ID: TRIP BLANK

Date Collected: 06/21/12 00:00  
Date Received: 06/22/12 09:10

### Lab Sample ID: 500-47604-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	154471	06/29/12 03:02	BDA	TAL CHI

#### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Certification Summary

Client: Environmental Information Logistics (EIL)  
 Project/Site: Interstate Pollution Control Site

TestAmerica Job ID: 500-47604-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Georgia	State Program	4	N/A
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Kentucky (UST)	State Program	4	66
TestAmerica Chicago	L-A-B	DoD ELAP		L2304
TestAmerica Chicago	L-A-B	ISO/IEC 17025		L2304
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina DENR	State Program	4	291
TestAmerica Chicago	North Dakota	State Program	8	R-194
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	Federal		P330-12-00038
TestAmerica Chicago	Virginia	NELAC	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

(optional)	
Report To	Contact:
Company:	Address:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail:	

(optional)	
Bill To	Contact:
Company:	Address:
Address:	Address:
Phone:	Phone:
Fax:	
PO#/Reference#	

## Chain of Custody Record

Lab Job #: 500-47604

Chain of Custody Number: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: 22

22

### Preservative Key

1. HCl, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

### Comments

ID	MS/SD	Sample ID	Sampling		# of Containers	Matrix	Parameter									
			Date	Time												
1	X	TPL-GW-MW1	6/21/12	10:33	1	W										
2		TPL-GW-MW2			1	W										
3		TPL-GW-MW3			1	W										
4		TPL-GW-MW4			1	W										
5		TPL-GW-MW5			1	W										
6		TPL-GW-MW6			1	W										
7		TPL-GW-MW7			1	W										
8		TPL-GW-MW8			1	W										
9		TPL-GW-MW9			1	W										
10		TPL-GW			1	W										

### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date \_\_\_\_\_

Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

Matrix Key:  
WW - Wastewater SE - Sediment  
W - Water SO - Soil  
S - Soil L - Leachate  
SL - Sludge WI - Wipe  
MS - Miscellaneous DW - Drinking Water  
OL - Oil O - Other  
A - Air

Client Comments:

Lab Comments:

#11-Trip Blank added by TA

## Login Sample Receipt Checklist

Client: Environmental Information Logistics (EIL)

Job Number: 500-47604-1

**Login Number: 47604**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Lunt, Jeff T**

Question	Answer	Comment	
Radioactivity either was not measured or, if measured, is at or below background	True		1
The cooler's custody seal, if present, is intact.	True		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True	2.2	5
Cooler Temperature is recorded.	True		6
COC is present.	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information.	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the sample IDs on the containers and the COC.	True		11
Samples are received within Holding Time.	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
Sample collection date/times are provided.	True		15
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

December 2008 Through June 2012  
Data Summary  
IPC/Roto-Rooter Site

Well	Location	Parameter ID	Parameter	Units	Interwell Upper Limit (95%)	Intrawell Upper Limit (99%)	Dec-08		Mar-09		Jun-09		Sep-09		Dec-09		Jun-10	
							Result	Qual										
MW1	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	25.1	9.4		NA		5	U	NA		11		5	U
MW1	Downgradient	190504	1,1-Dichloroethane	ug/L	14	24.0	13		NA		14		NA		14		16	
MW1	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	21.1	14		NA		9.5		NA		12		11	
MW1	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	295	230		NA		170		NA		160		130	
MW1	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.6	5	U	NA		5	U	NA		5	U	5	U
MW1	Downgradient	185820	Trichloroethene	ug/L	340	324	45		NA		20		NA		52		20	
MW1	Downgradient	185825	Vinyl Chloride	ug/L	48	10.4	7.3		NA		6.9		NA		10		16	
MW2	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	39.3	21		NA		15		NA		25		22	
MW2	Downgradient	190504	1,1-Dichloroethane	ug/L	14	5.4	5	U	NA		5	U	NA		5	U	5	U
MW2	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	30.6	17		NA		13		NA		22		23	
MW2	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	131	52		NA		37		NA		92		58	
MW2	Downgradient	190525	Tetrachloroethene	ug/L	45.8	23.1	23		NA		17		NA		34		33	
MW2	Downgradient	185820	Trichloroethene	ug/L	340	293	230		NA		150		NA		210		200	
MW2	Downgradient	185825	Vinyl Chloride	ug/L	48	10.0	4.5		NA		2	U	NA		2	U	2	U
MW3	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	45.5	22		NA		21		NA		27		24	
MW3	Upgradient	190504	1,1-Dichloroethane	ug/L	14	11.0	5	U	NA		11		NA		5	U	5.2	
MW3	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	36.3	17		NA		17		NA		21		23	
MW3	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	126	50		NA		74		NA		58		56	
MW3	Upgradient	190525	Tetrachloroethene	ug/L	45.8	39.7	25		NA		28		NA		38		40	
MW3	Upgradient	185820	Trichloroethene	ug/L	340	310	230		NA		170		NA		240		210	
MW3	Upgradient	185825	Vinyl Chloride	ug/L	48	2.0	2	U	NA		2	U	NA		2	U	2	U
MW4	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	47.2	21		NA		17		NA		18		17	
MW4	Downgradient	190504	1,1-Dichloroethane	ug/L	14	69.9	13		NA		27		NA		22		20	
MW4	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	33.0	14		NA		11		NA		9.8		11	
MW4	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	461	190		NA		180		NA		160		150	
MW4	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	5	U	NA		5	U	NA		5	U	5	U
MW4	Downgradient	185820	Trichloroethene	ug/L	340	5.0	5	U	NA		5	U	NA		5	U	5	U
MW4	Downgradient	185825	Vinyl Chloride	ug/L	48	137	65		NA		74		NA		67		76	
MW5	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	78.5	35		NA		32		NA		39		27	
MW5	Upgradient	190504	1,1-Dichloroethane	ug/L	14	25.8	8.8		NA		6		NA		6.6		5.5	
MW5	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	34.0	27		NA		23		NA		26		23	
MW5	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	519	250		NA		180		NA		140		120	
MW5	Upgradient	190525	Tetrachloroethene	ug/L	45.8	75.7	29		NA		34		NA		42		37	
MW5	Upgradient	185820	Trichloroethene	ug/L	340	390	200		NA		180		NA		230		160	
MW5	Upgradient	185825	Vinyl Chloride	ug/L	48	15.0	7.7		NA		8.8		NA		7.2		5.7	

December 2008 Through June 2012

Data Summary

IPC/Roto-Rooter Site

Well	Location	Parameter ID	Parameter	Units	Interwell Upper Limit (95%)	Intrawell Upper Limit (99%)	Dec-08		Mar-09		Jun-09		Sep-09		Dec-09		Jun-10	
							Result	Qual										
MW6	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	71.3	22		NA		31		NA		37		31	
MW6	Upgradient	190504	1,1-Dichloroethane	ug/L	14	42.1	6.8		NA		5	U	NA		6.7		5.9	
MW6	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	36.5	15		NA		22		NA		24		25	
MW6	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	352	200		NA		210		NA		190		180	
MW6	Upgradient	190525	Tetrachloroethene	ug/L	45.8	47.6	6.1		NA		15		NA		5	U	24	
MW6	Upgradient	185820	Trichloroethene	ug/L	340	220	32		NA		73		NA		150		95	
MW6	Upgradient	185825	Vinyl Chloride	ug/L	48	104	24		NA		25		NA		18		25	
MW8	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	30.2	NA		5	U	5	U	6.1		11		5	U
MW8	Downgradient	190504	1,1-Dichloroethane	ug/L	14	34.0	NA		5	U	5	U	6.8		12		5	U
MW8	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	14.1	NA		5	U	5	U	5.1		7.1		5	U
MW8	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	78.2	NA		11		5	U	18		29		10	
MW8	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW8	Downgradient	185820	Trichloroethene	ug/L	340	171	NA		27		14		36		75		29	
MW8	Downgradient	185825	Vinyl Chloride	ug/L	48	2.0	NA		2	U	2	U	2	U	2	U	2	U
MW9	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW9	Downgradient	190504	1,1-Dichloroethane	ug/L	14	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW9	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW9	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW9	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW9	Downgradient	185820	Trichloroethene	ug/L	340	5.0	NA		5	U	5	U	5	U	5	U	5	U
MW9	Downgradient	185825	Vinyl Chloride	ug/L	48	2.0	NA		2	U	2	U	2	U	2	U	2	U

All data reported in ug/L.

NA - Not Applicable

U - Not Detected

\* - Suspect December 2011 MW-9 data is actually the blind field duplicate for MW-1 (bottles switched in field or lab). Collected re-sample in April 2012 to confirm.

Interwell and Intrawell limits calculated using background data collected: Sep. 2007, Dec. 2007, Mar. 2008, and Jun. 2008. **Except for the following:**

Interwell limits for 1,1-dichloroethane; tetrachloroethene; and trichloroethene collected: Dec. 2007, Jun. 2008, Dec. 2008, and Jun. 2009

Intrawell limits for 1,1-dichloroethane (MW3); tetrachloroethene and trichloroethene (MW6) collected: Dec. 2007, Jun. 2008, Dec. 2008, and Jun. 2009.

Intrawell limits for all parameters (MW8 and MW9) collected: Mar. 2009, Jun. 2009, Sep. 2009, and Dec. 2009.

December 2008 Through June 2012

Data Summary

IPC/Roto-Rooter Site

Well	Location	Parameter ID	Parameter	Units	Interwell Upper Limit (95%)	Intrawell Upper Limit (99%)	Jul-10		Dec-10		Jun-11		Dec-11		Apr-12		Jun-12	
							Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
MW1	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	25.1	NA		5	U	5	U	5.2		NA		5.9	
MW1	Downgradient	190504	1,1-Dichloroethane	ug/L	<b>14</b>	24.0	<b>17</b>		14		<b>15</b>		12		NA		14	
MW1	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	21.1	NA		9.3		12		13		NA		15	
MW1	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	295	NA		130		140		140		NA		160	
MW1	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.6	NA		5	U	5	U	5	U	NA		5	U
MW1	Downgradient	185820	Trichloroethene	ug/L	340	324	NA		13		9.1		21		NA		17	
MW1	Downgradient	185825	Vinyl Chloride	ug/L	48	10.4	NA		16		19		15		NA		16	
MW2	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	39.3	NA		21		21		14		NA		15	
MW2	Downgradient	190504	1,1-Dichloroethane	ug/L	14	5.4	NA		5	U	5	U	5	U	NA		5	U
MW2	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	30.6	NA		22		22		15		NA		16	
MW2	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	131	NA		56		59		53		NA		51	
MW2	Downgradient	190525	Tetrachloroethene	ug/L	45.8	23.1	NA		38		31		34		NA		27	
MW2	Downgradient	185820	Trichloroethene	ug/L	340	293	NA		200		150		140		NA		130	
MW2	Downgradient	185825	Vinyl Chloride	ug/L	48	10.0	NA		2	U	2	U	2.8		NA		7.6	
MW3	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	45.5	NA		22		24		18		NA		19	
MW3	Upgradient	190504	1,1-Dichloroethane	ug/L	14	11.0	NA		5	U	5.7		5	U	NA		5	U
MW3	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	36.3	NA		20		22		19		NA		19	
MW3	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	126	NA		46		65		46		NA		44	
MW3	Upgradient	190525	Tetrachloroethene	ug/L	<b>45.8</b>	<b>39.7</b>	NA		37		<b>43</b>		<b>54</b>		NA		<b>41</b>	
MW3	Upgradient	185820	Trichloroethene	ug/L	340	310	NA		180		180		230		NA		190	
MW3	Upgradient	185825	Vinyl Chloride	ug/L	48	2.0	NA		2	U	2	U	2	U	NA		2	U
MW4	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	47.2	NA		13		13		11		NA		12	
MW4	Downgradient	190504	1,1-Dichloroethane	ug/L	<b>14</b>	69.9	NA		14		<b>24</b>		7.9		NA		<b>17</b>	
MW4	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	33.0	NA		8.1		5.9		6.2		NA		5.6	
MW4	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	461	NA		110		88		78		NA		67	
MW4	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	NA		5	U	5	U	5	U	NA		5	U
MW4	Downgradient	185820	Trichloroethene	ug/L	340	5.0	NA		5	U	5	U	5	U	NA		5	U
MW4	Downgradient	185825	Vinyl Chloride	ug/L	<b>48</b>	137	NA		<b>59</b>		<b>60</b>		33		NA		<b>56</b>	
MW5	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	78.5	NA		24		28		18		NA		17	
MW5	Upgradient	190504	1,1-Dichloroethane	ug/L	14	25.8	NA		6.5		6.6		5	U	NA		7.1	
MW5	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	34.0	NA		22		24		18		NA		16	
MW5	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	519	NA		110		130		71		NA		78	
MW5	Upgradient	190525	Tetrachloroethene	ug/L	45.8	75.7	NA		38		38		45		NA		34	
MW5	Upgradient	185820	Trichloroethene	ug/L	340	390	NA		150		160		150		NA		130	
MW5	Upgradient	185825	Vinyl Chloride	ug/L	48	15.0	NA		3.8		6.3		2	U	NA		4.5	

December 2008 Through June 2012

Data Summary

IPC/Roto-Rooter Site

Well	Location	Parameter ID	Parameter	Units	Interwell Upper Limit (95%)	Intrawell Upper Limit (99%)	Jul-10		Dec-10		Jun-11		Dec-11		Apr-12		Jun-12	
							Result	Qual										
MW6	Upgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	71.3	NA		23		26		17		NA		15	
MW6	Upgradient	190504	1,1-Dichloroethane	ug/L	14	42.1	NA		6.8		11		7		NA		9.4	
MW6	Upgradient	190499	1,1-Dichloroethene	ug/L	32.9	36.5	NA		19		19		14		NA		11	
MW6	Upgradient	147907	cis-1,2-Dichloroethene	ug/L	250	352	NA		110		91		77		NA		100	
MW6	Upgradient	190525	Tetrachloroethene	ug/L	45.8	47.6	NA		27		32		27		NA		12	
MW6	Upgradient	185820	Trichloroethene	ug/L	340	220	NA		110		130		94		NA		44	
MW6	Upgradient	185825	Vinyl Chloride	ug/L	48	104	NA		12		10		11		NA		26	
MW8	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	30.2	NA		5.3		5	U	5	U	NA		5	U
MW8	Downgradient	190504	1,1-Dichloroethane	ug/L	14	34.0	NA		14		7.9		16		7.7		9.3	
MW8	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	14.1	NA		5		5	U	6.5		NA		5	U
MW8	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	78.2	NA		29		17		46		NA		20	
MW8	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	NA		5	U	5	U	6.6		NA		5	U
MW8	Downgradient	185820	Trichloroethene	ug/L	340	171	NA		40		28		58		NA		30	
MW8	Downgradient	185825	Vinyl Chloride	ug/L	48	2.0	NA		2	U	2	U	2	U	NA		2	U
MW9	Downgradient	190494	1,1,1-Trichloroethane	ug/L	52.5	5.0	NA		5	U	5	U	5	U,*	5	U	5	U
MW9	Downgradient	190504	1,1-Dichloroethane	ug/L	14	5.0	NA		5	U	5	U	11	*	5	U	11	
MW9	Downgradient	190499	1,1-Dichloroethene	ug/L	32.9	5.0	NA		5	U	5	U	12	*	5	U	5	U
MW9	Downgradient	147907	cis-1,2-Dichloroethene	ug/L	250	5.0	NA		5	U	5	U	120	*	5	U	25	
MW9	Downgradient	190525	Tetrachloroethene	ug/L	45.8	5.0	NA		5	U	5	U	5	U,*	5	U	5	U
MW9	Downgradient	185820	Trichloroethene	ug/L	340	5.0	NA		5	U	5	U	20	*	5	U	5	U
MW9	Downgradient	185825	Vinyl Chloride	ug/L	48	2.0	NA		2	U	2	U	14	*	2	U	2	U

All data reported in ug/L.

NA - Not Applicable

U - Not Detected

\* - Suspect December 2011 MW-9 data is actually the blind field duplicate for MW-1 (bottles s

Interwell and Intrawell limits calculated using background data collected: Sep. 2007, Dec. 2007

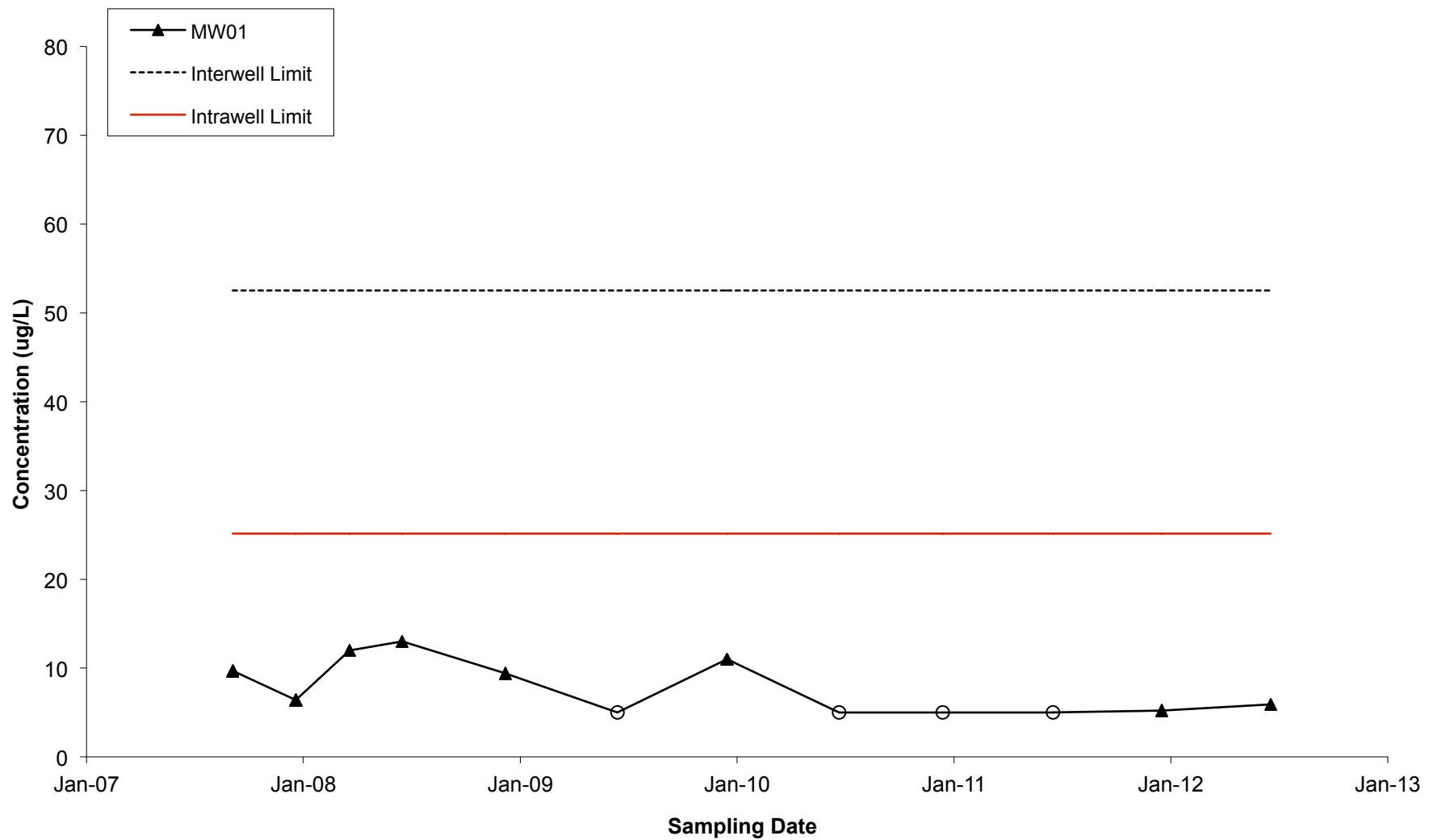
Interwell limits for 1,1-dichloroethane; tetrachloroethene; and trichloroethene collect

Intrawell limits for 1,1-dichloroethane (MW3); tetrachloroethene and trichloroethene

Intrawell limits for all parameters (MW8 and MW9) collected: Mar. 2009, Jun. 2009,

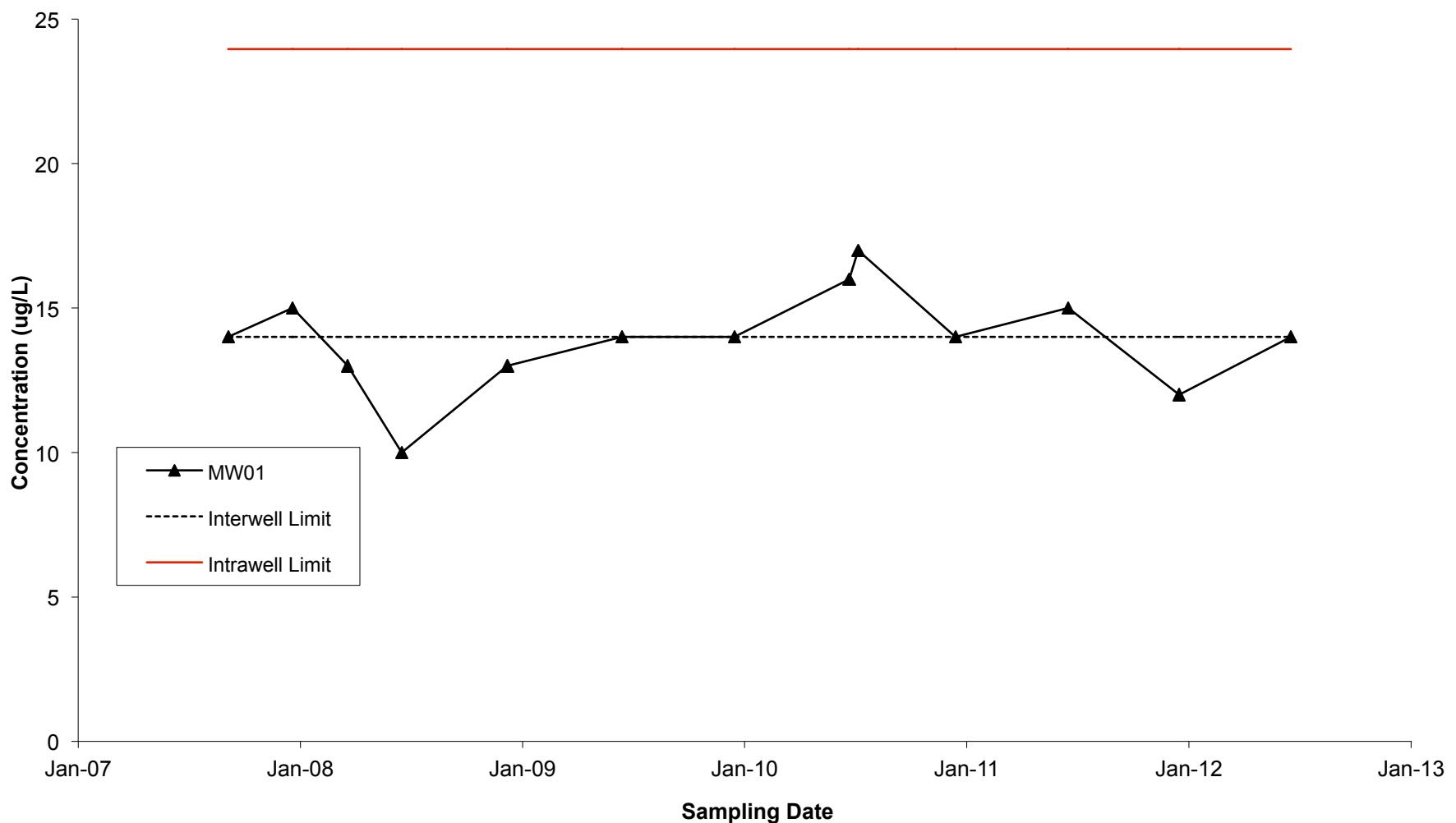
**1,1,1-Trichloroethane in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



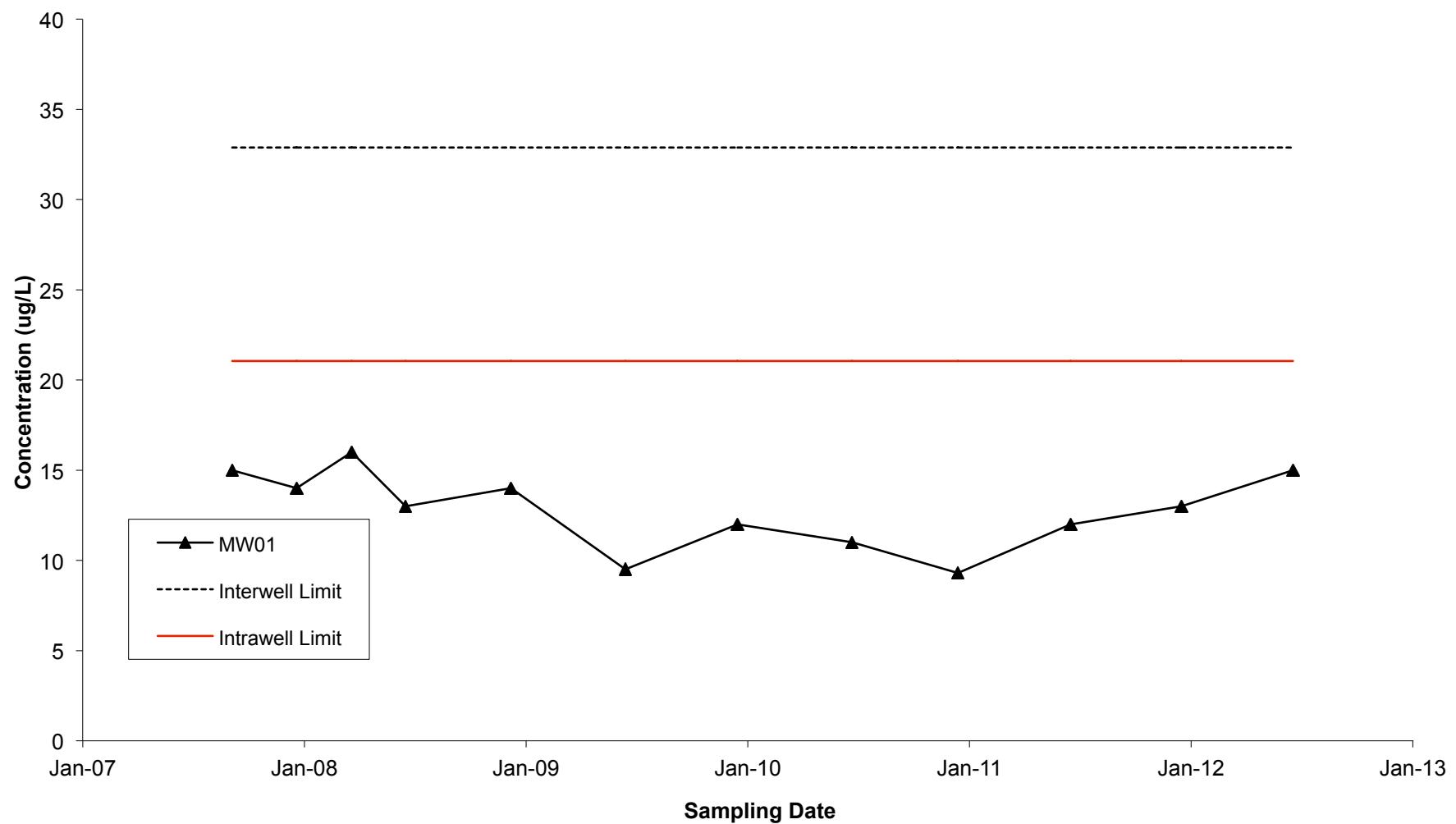
**1,1-Dichloroethane in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



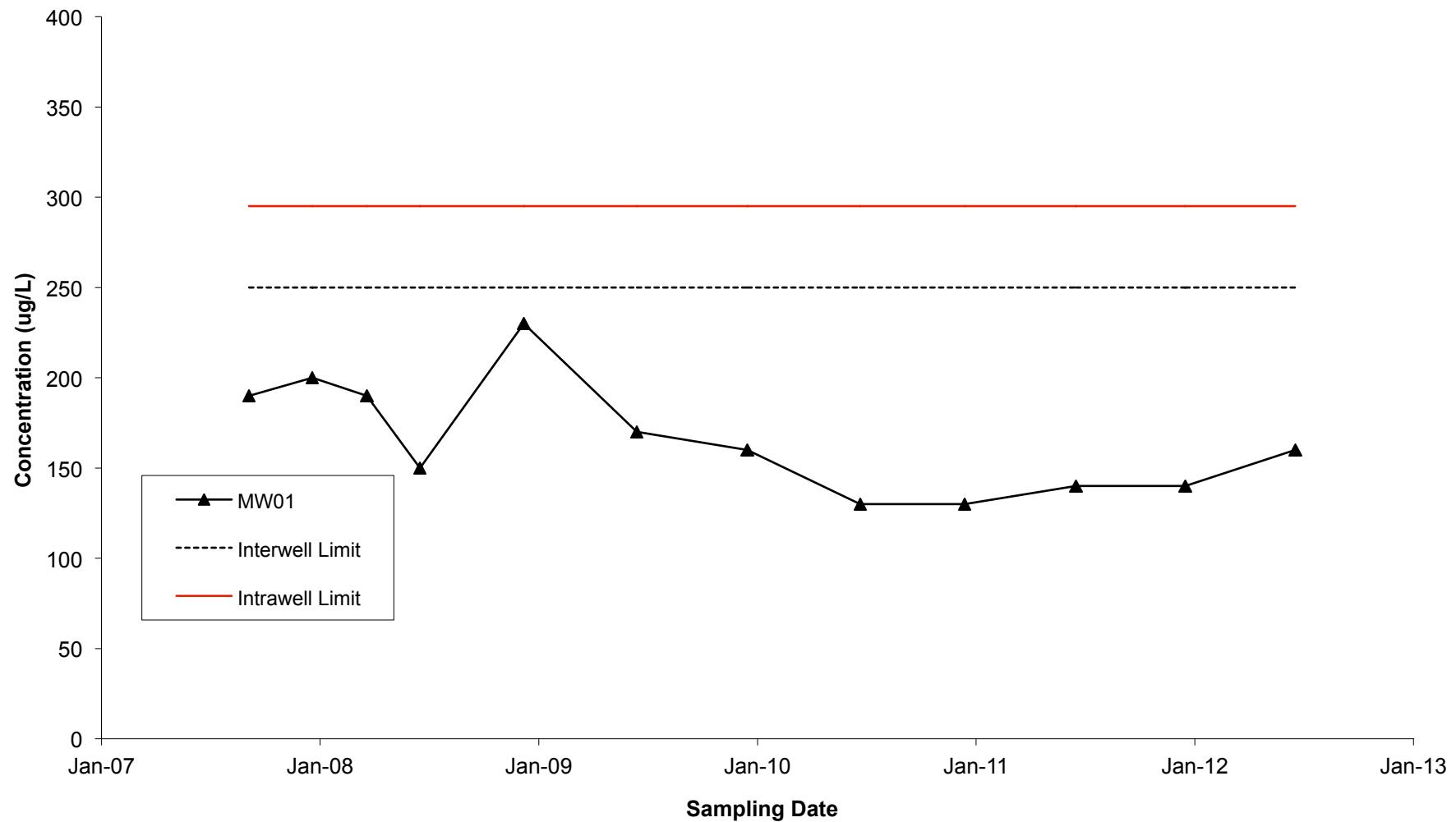
**1,1-Dichloroethene in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



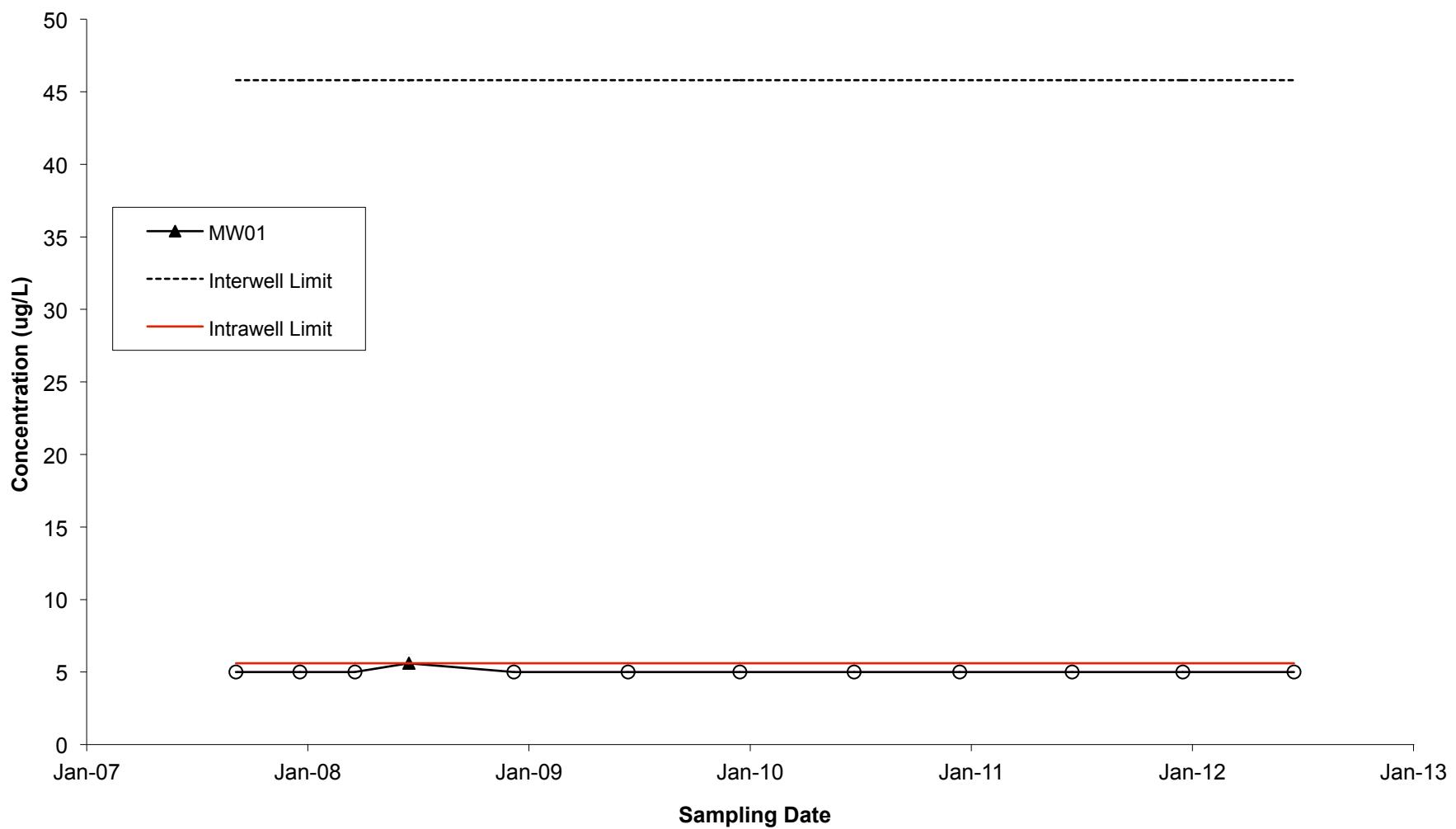
**cis-1,2-Dichloroethene in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



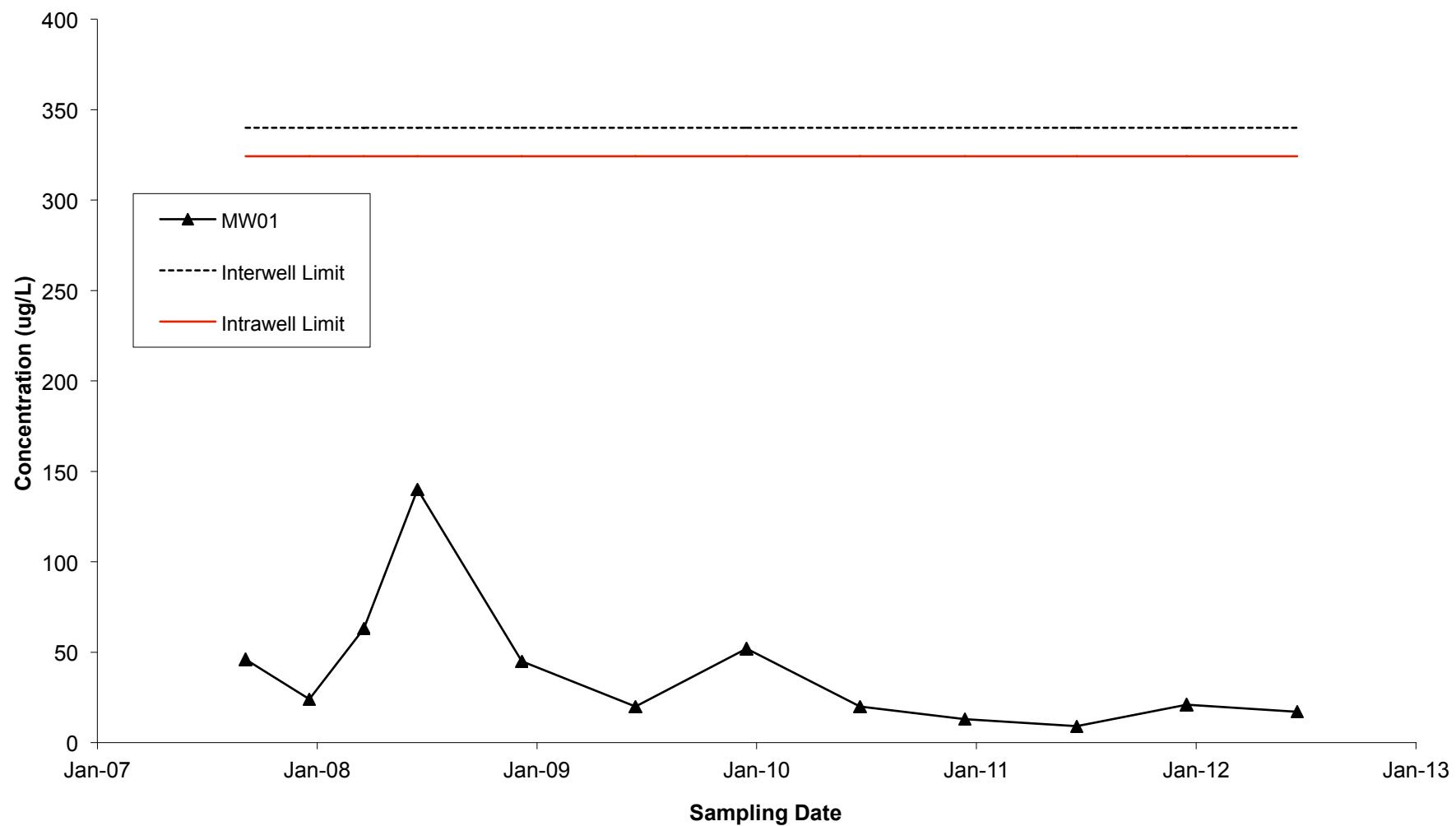
**Tetrachloroethene in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



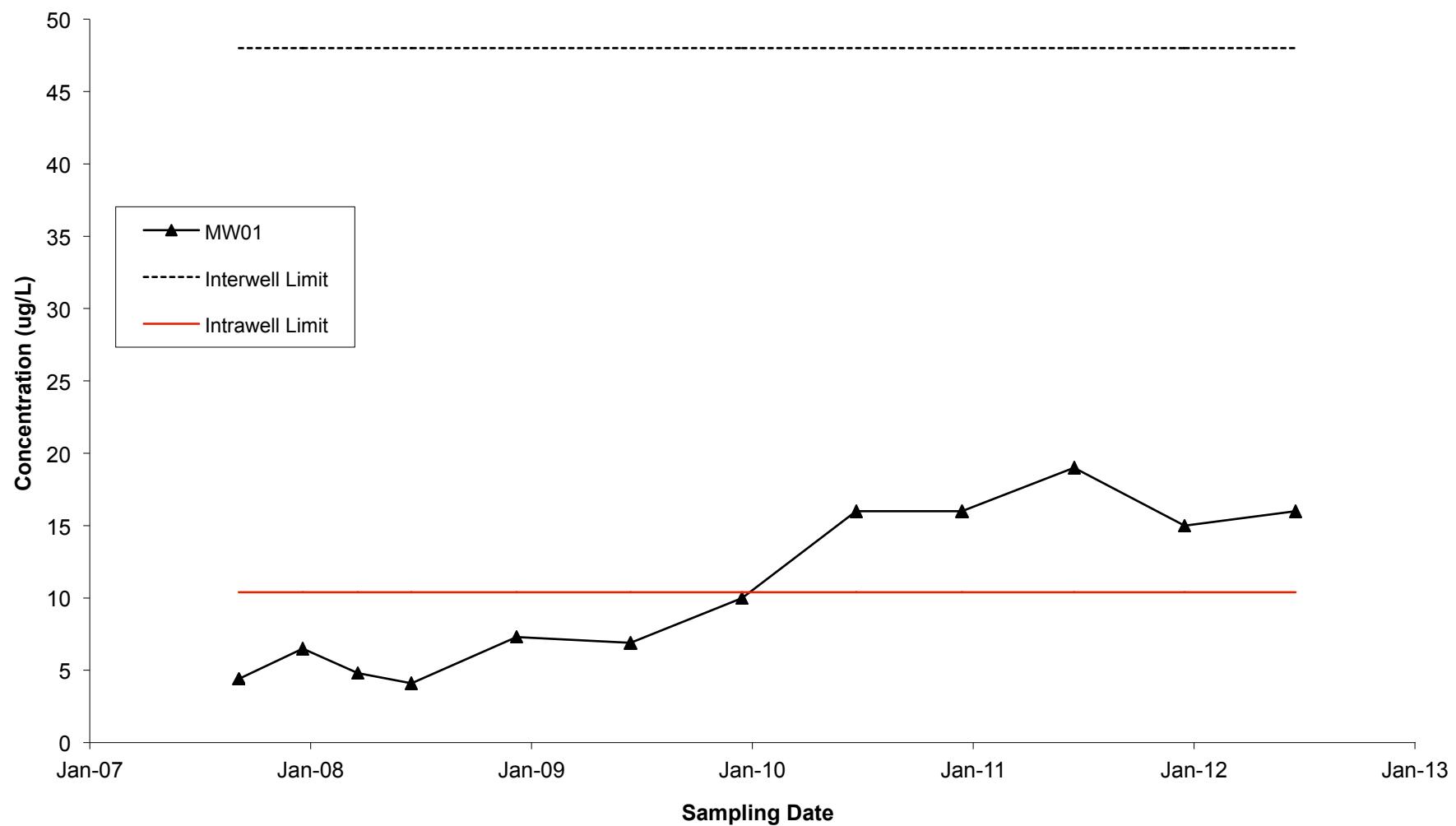
**Trichloroethene in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



**Vinyl Chloride in Well MW01**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Sep-07	ug/L	9.7
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Dec-07	ug/L	6.4
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Mar-08	ug/L	12
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Jun-08	ug/L	13
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Dec-08	ug/L	9.4
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Dec-09	ug/L	11
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Dec-10	ug/L	5.0
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	Jun-11	ug/L	5.0
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	12/20/11	ug/L	5.2
IPC/Roto-Rooter	MW01	190494	1,1,1-Trichloroethane	6/21/12	ug/L	5.9
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Sep-07	ug/L	14
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Dec-07	ug/L	15
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Mar-08	ug/L	13
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Jun-08	ug/L	10
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Dec-08	ug/L	13
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Jun-09	ug/L	14
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Dec-09	ug/L	14
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Jun-10	ug/L	16
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Jul-10	ug/L	17
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Dec-10	ug/L	14
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	Jun-11	ug/L	15
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	12/20/11	ug/L	12
IPC/Roto-Rooter	MW01	190504	1,1-Dichloroethane	6/21/12	ug/L	14
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Sep-07	ug/L	15
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Dec-07	ug/L	14
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Mar-08	ug/L	16
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Jun-08	ug/L	13
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Dec-08	ug/L	14
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Jun-09	ug/L	9.5
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Dec-09	ug/L	12
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Jun-10	ug/L	11
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Dec-10	ug/L	9.3
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	Jun-11	ug/L	12.0
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	12/20/11	ug/L	13
IPC/Roto-Rooter	MW01	190499	1,1-Dichloroethene	6/21/12	ug/L	15
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Sep-07	ug/L	190
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Dec-07	ug/L	200
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Mar-08	ug/L	190
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Jun-08	ug/L	150
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Dec-08	ug/L	230
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	170
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	160
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	130
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	130
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	140
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	140
IPC/Roto-Rooter	MW01	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	160
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Dec-07	ug/L	5.0
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Mar-08	ug/L	5.0

IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Jun-08	ug/L	5.6
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Dec-08	ug/L	5.0
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	12/20/11	ug/L	5
IPC/Roto-Rooter	MW01	190525	Tetrachloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Sep-07	ug/L	46
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Dec-07	ug/L	24
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Mar-08	ug/L	63
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Jun-08	ug/L	140
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Dec-08	ug/L	45
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Jun-09	ug/L	20
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Dec-09	ug/L	52
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Jun-10	ug/L	20
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Dec-10	ug/L	13
IPC/Roto-Rooter	MW01	185820	Trichloroethene	Jun-11	ug/L	9.1
IPC/Roto-Rooter	MW01	185820	Trichloroethene	12/20/11	ug/L	21
IPC/Roto-Rooter	MW01	185820	Trichloroethene	6/21/12	ug/L	17
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Sep-07	ug/L	4.4
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Dec-07	ug/L	6.5
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Mar-08	ug/L	4.8
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Jun-08	ug/L	4.1
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Dec-08	ug/L	7.3
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Jun-09	ug/L	6.9
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Dec-09	ug/L	10
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Jun-10	ug/L	16
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Dec-10	ug/L	16
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	Jun-11	ug/L	19
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	12/20/11	ug/L	15
IPC/Roto-Rooter	MW01	185825	Vinyl Chloride	6/21/12	ug/L	16

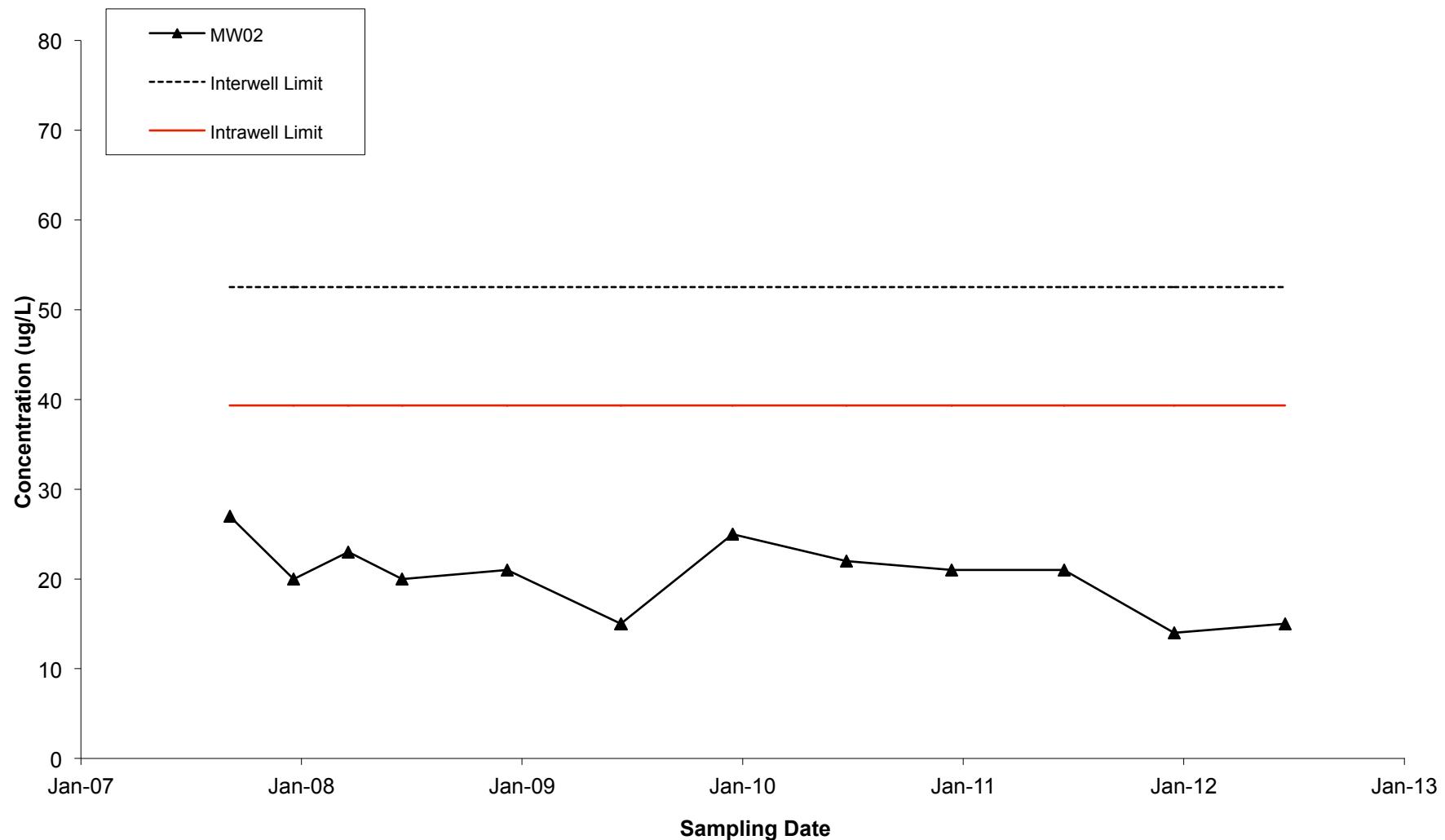






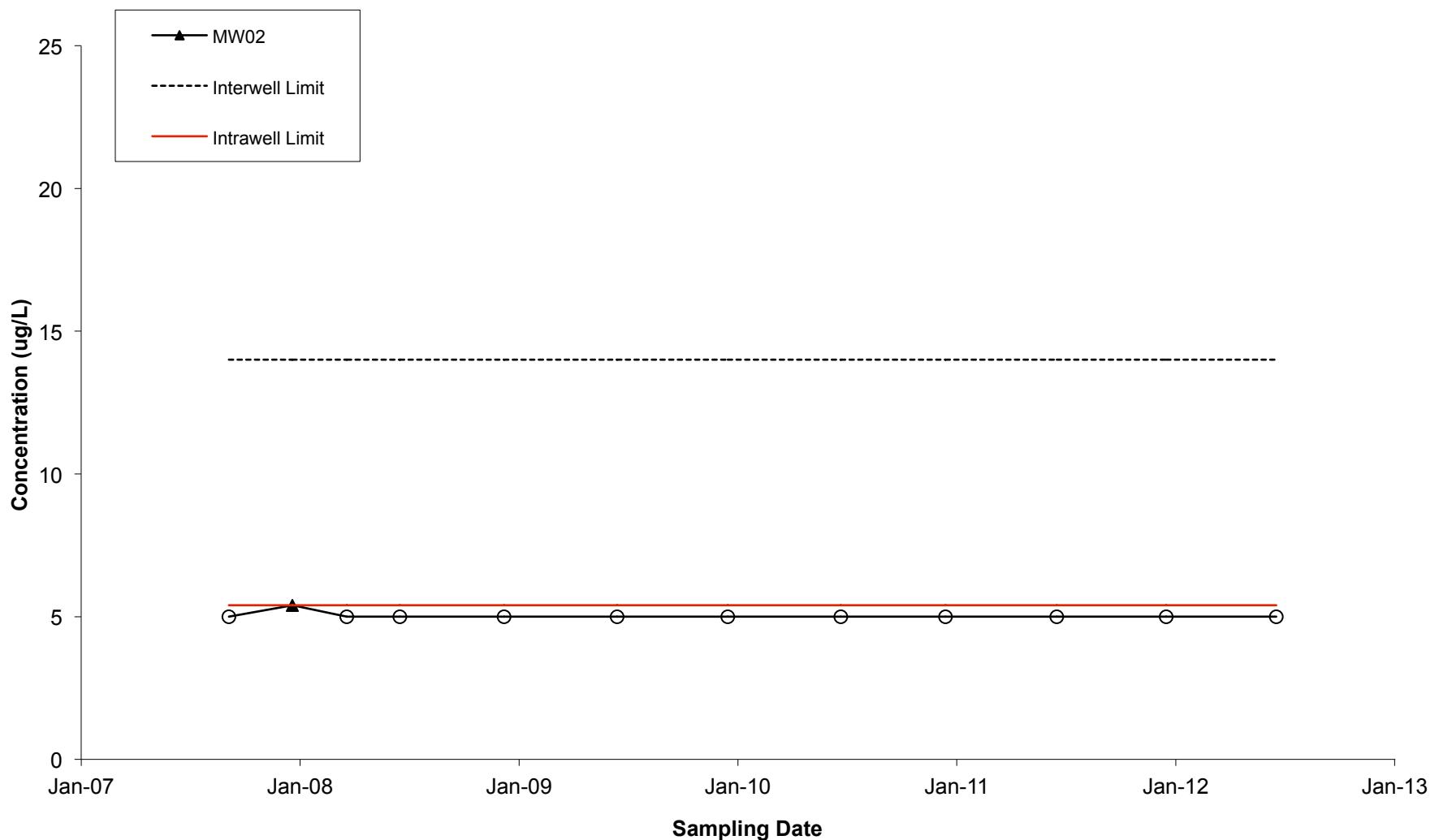
**1,1,1-Trichloroethane in Well MW02**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



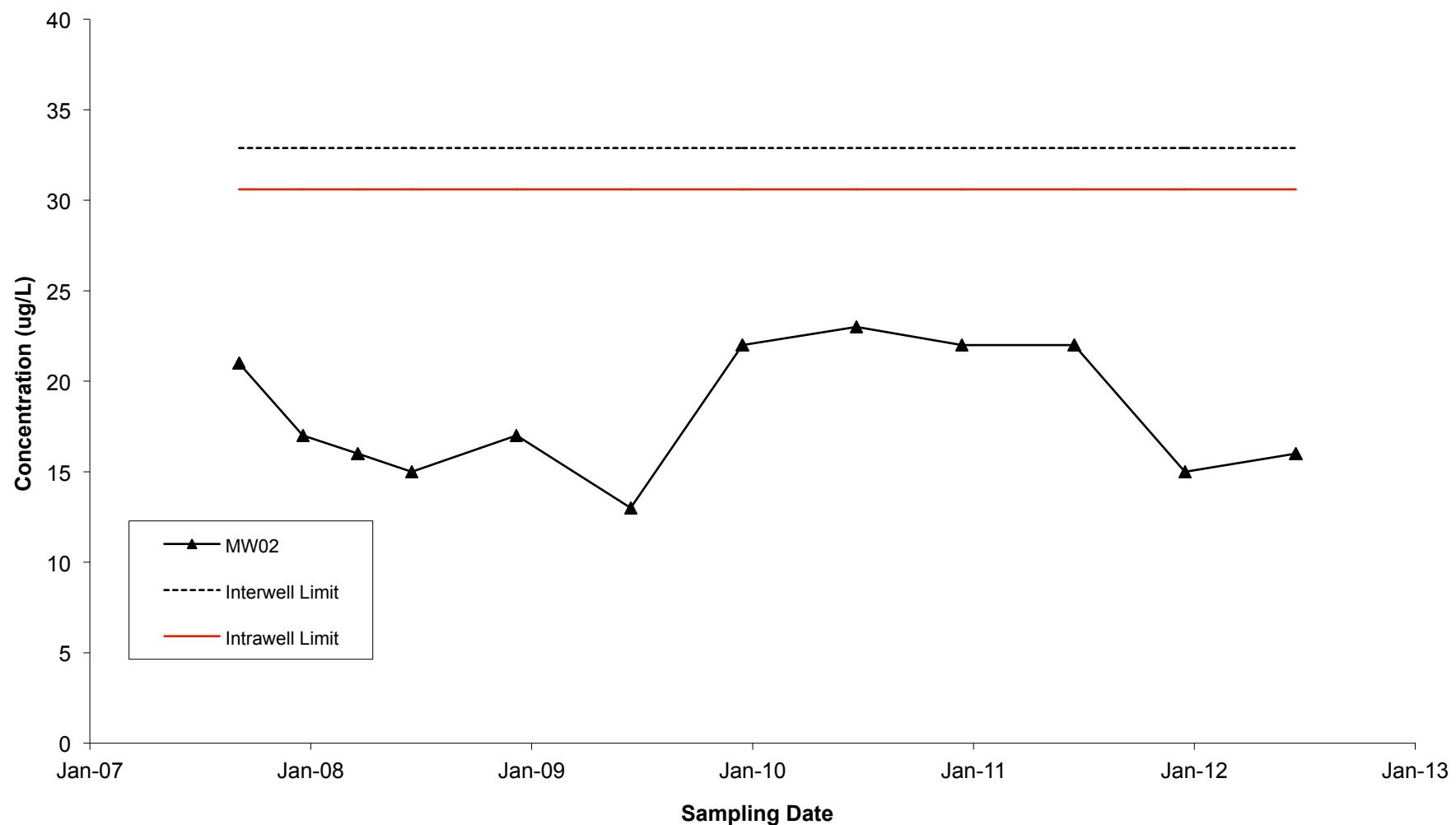
**1,1-Dichloroethane in Well MW02**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



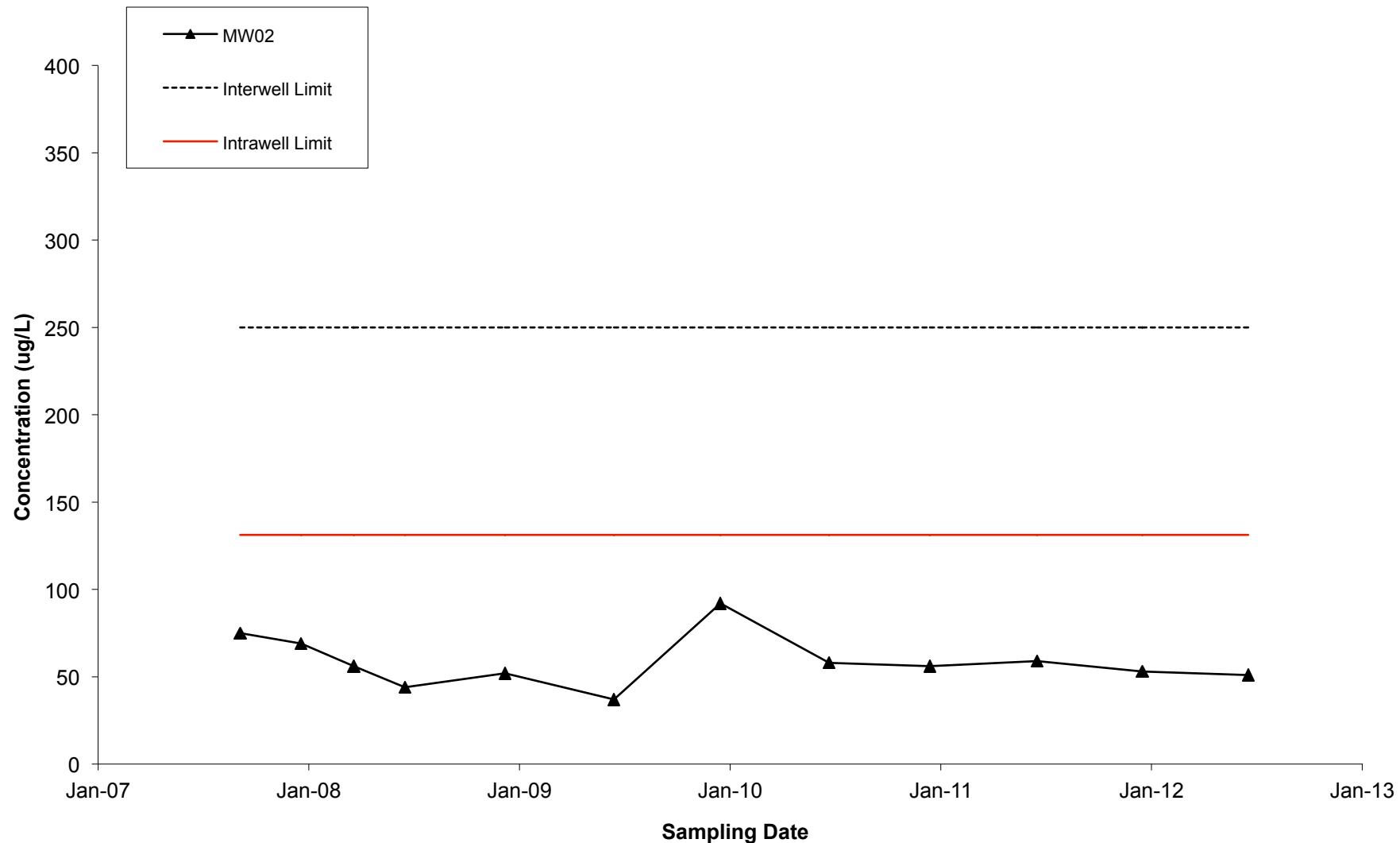
**1,1-Dichloroethene in Well MW02**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



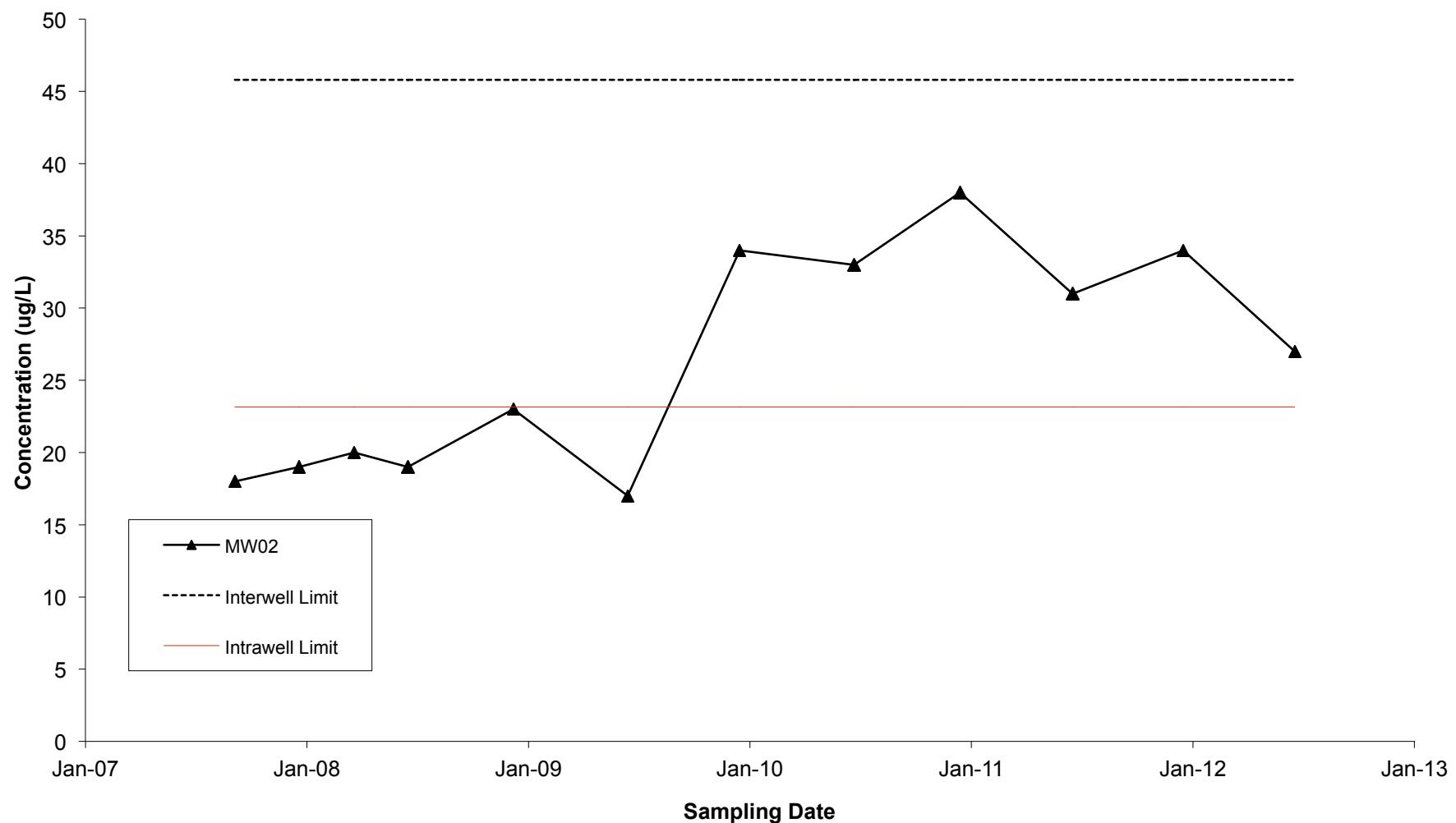
**cis-1,2-Dichloroethene in Well MW02**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



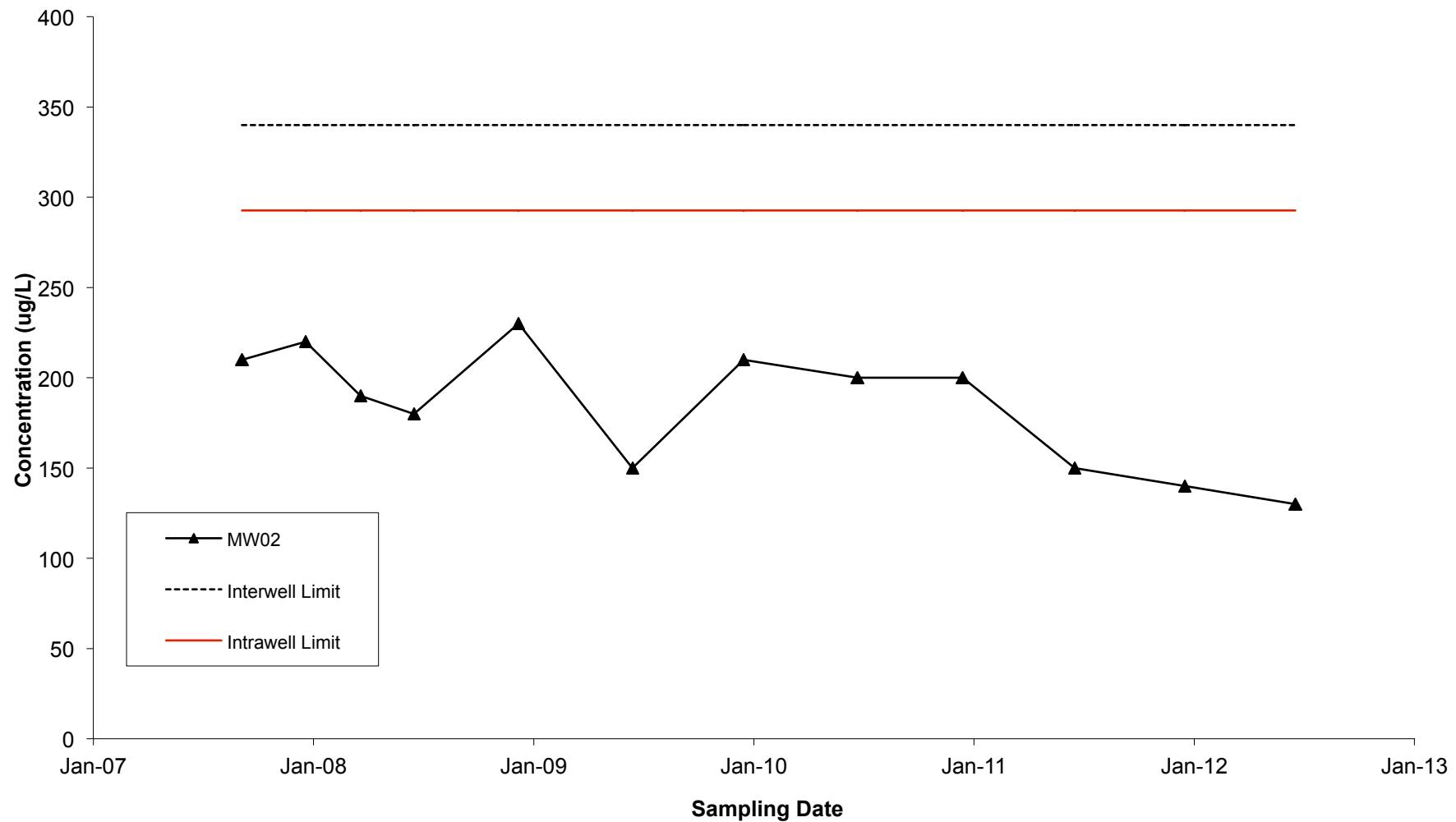
**Tetrachloroethene in Well MW02**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



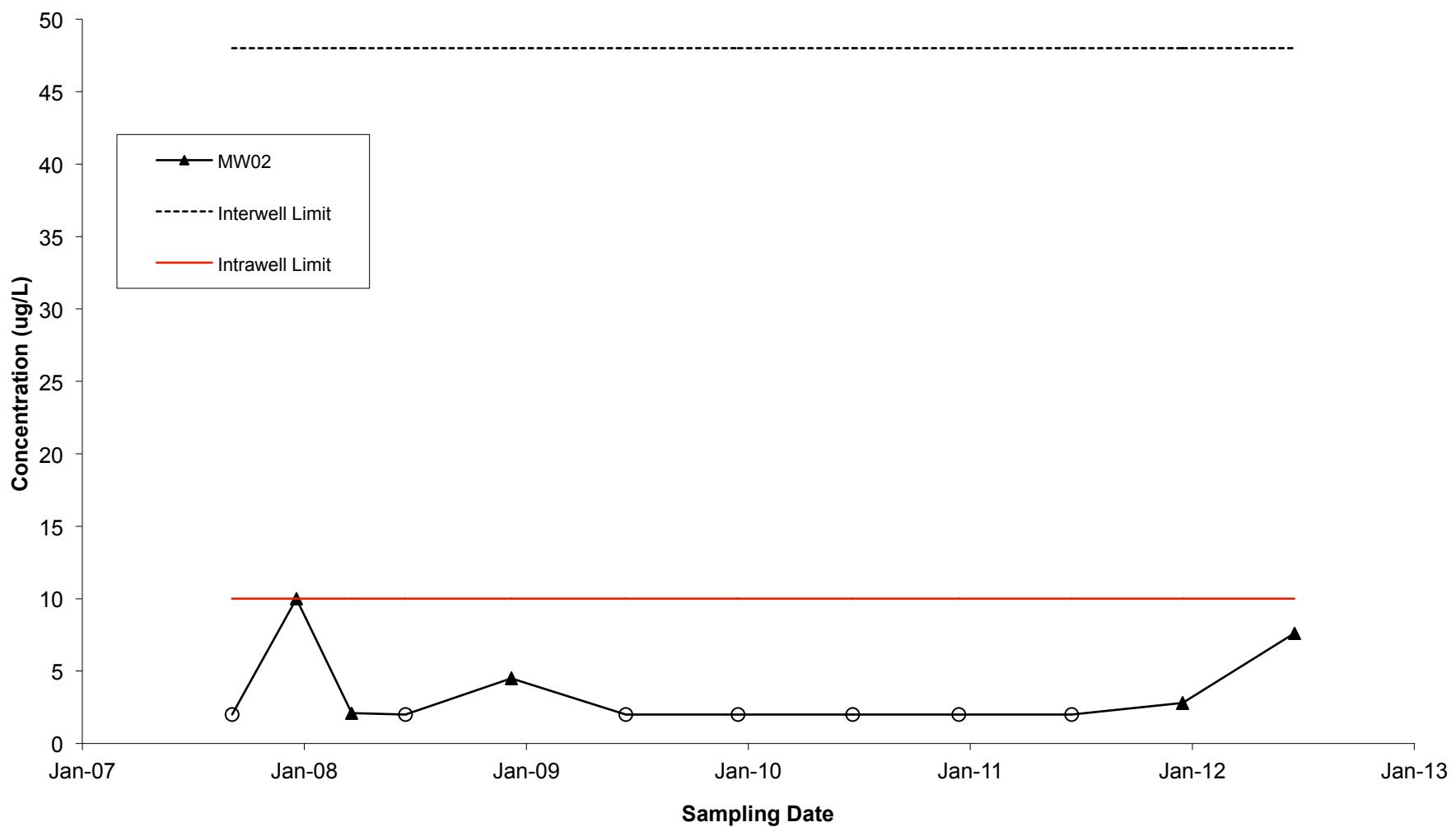
**Trichloroethene in Well MW02**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



## Vinyl Chloride in Well MW02 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Sep-07	ug/L	27
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Dec-07	ug/L	20
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Mar-08	ug/L	23
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Jun-08	ug/L	20
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Dec-08	ug/L	21
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Jun-09	ug/L	15
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Dec-09	ug/L	25
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Jun-10	ug/L	22
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Dec-10	ug/L	21
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	Jun-11	ug/L	21
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	12/20/11	ug/L	14
IPC/Roto-Rooter	MW02	190494	1,1,1-Trichloroethane	6/21/12	ug/L	15
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Dec-07	ug/L	5.4
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Jun-08	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Dec-08	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Dec-10	ug/L	5
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	Jun-11	ug/L	5
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	12/20/11	ug/L	5
IPC/Roto-Rooter	MW02	190504	1,1-Dichloroethane	6/21/12	ug/L	5
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Sep-07	ug/L	21
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Dec-07	ug/L	17
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Mar-08	ug/L	16
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Jun-08	ug/L	15
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Dec-08	ug/L	17
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Jun-09	ug/L	13
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Dec-09	ug/L	22
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Jun-10	ug/L	23
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Dec-10	ug/L	22
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	Jun-11	ug/L	22
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	12/20/11	ug/L	15
IPC/Roto-Rooter	MW02	190499	1,1-Dichloroethene	6/21/12	ug/L	16
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Sep-07	ug/L	75
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Dec-07	ug/L	69
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Mar-08	ug/L	56
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Jun-08	ug/L	44
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Dec-08	ug/L	52
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	37
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	92
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	58
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	56
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	59
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	53
IPC/Roto-Rooter	MW02	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	51
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Sep-07	ug/L	18
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Dec-07	ug/L	19
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Mar-08	ug/L	20
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Jun-08	ug/L	19

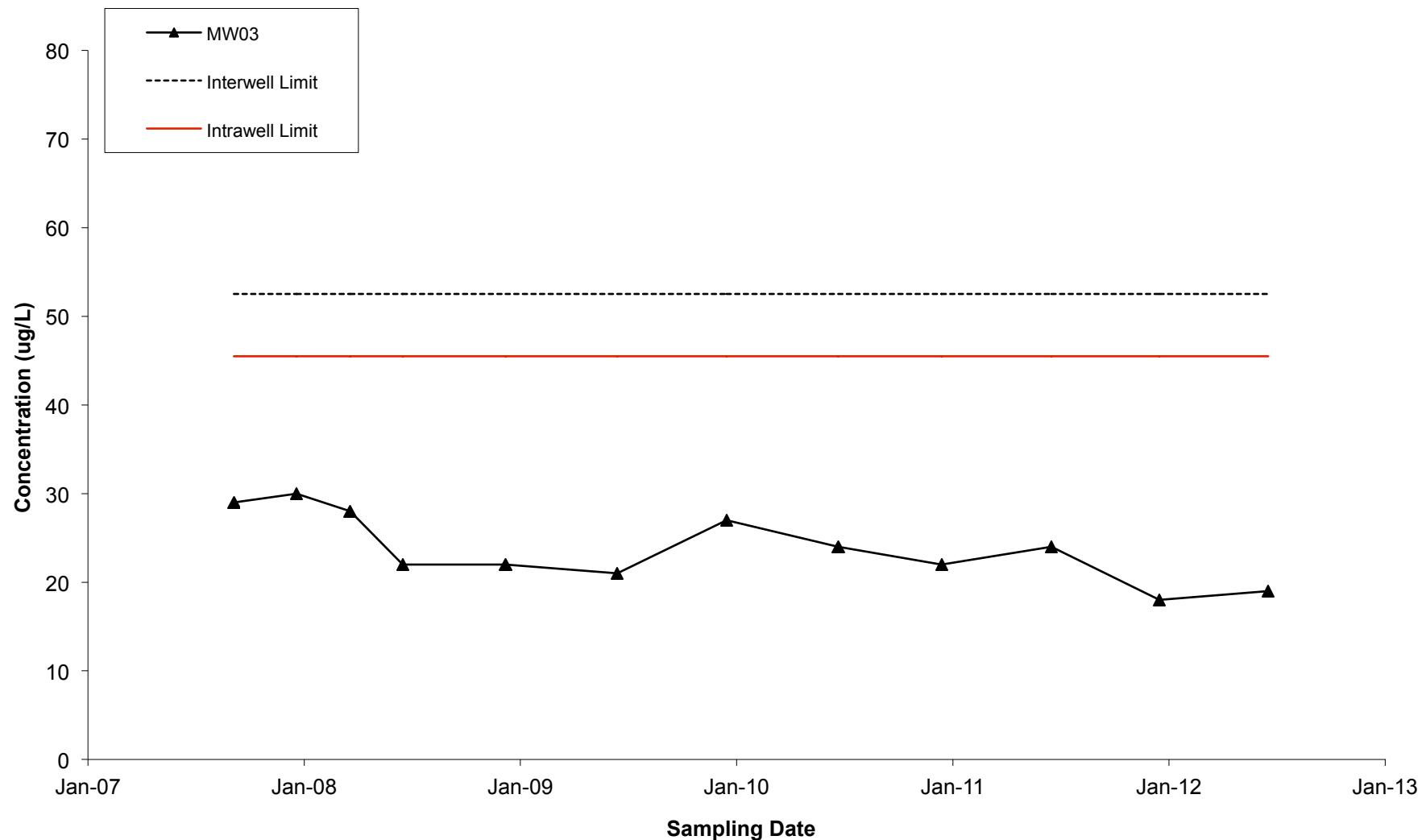
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Dec-08	ug/L	23
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Jun-09	ug/L	17
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Dec-09	ug/L	34
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Jun-10	ug/L	33
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Dec-10	ug/L	38
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	Jun-11	ug/L	31
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	12/20/11	ug/L	34
IPC/Roto-Rooter	MW02	190525	Tetrachloroethene	6/21/12	ug/L	27
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Sep-07	ug/L	210
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Dec-07	ug/L	220
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Mar-08	ug/L	190
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Jun-08	ug/L	180
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Dec-08	ug/L	230
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Jun-09	ug/L	150
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Dec-09	ug/L	210
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Jun-10	ug/L	200
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Dec-10	ug/L	200
IPC/Roto-Rooter	MW02	185820	Trichloroethene	Jun-11	ug/L	150
IPC/Roto-Rooter	MW02	185820	Trichloroethene	12/20/11	ug/L	140
IPC/Roto-Rooter	MW02	185820	Trichloroethene	6/21/12	ug/L	130
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Sep-07	ug/L	2.0
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Dec-07	ug/L	10
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Mar-08	ug/L	2.1
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Jun-08	ug/L	2.0
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Dec-08	ug/L	4.5
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Jun-09	ug/L	2.0
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Dec-09	ug/L	2.0
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Jun-10	ug/L	2.0
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Dec-10	ug/L	2
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	Jun-11	ug/L	2
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	12/20/11	ug/L	2.8
IPC/Roto-Rooter	MW02	185825	Vinyl Chloride	6/21/12	ug/L	7.6



	5	Interwell Limit	45.8	Intrawell Limit	23.1
	5	Interwell Limit	45.8	Intrawell Limit	23.1
	5	Interwell Limit	45.8	Intrawell Limit	23.1
	5	Interwell Limit	45.8	Intrawell Limit	23.1
	5	Interwell Limit	45.8	Intrawell Limit	23.1
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	50	Interwell Limit	340	Intrawell Limit	293
	50	Interwell Limit	340	Intrawell Limit	293
	25	Interwell Limit	340	Intrawell Limit	293
	50	Interwell Limit	340	Intrawell Limit	293
	50	Interwell Limit	340	Intrawell Limit	293
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U	2	Interwell Limit	48	Intrawell Limit	10.0
	2	Interwell Limit	48	Intrawell Limit	10.0
	2	Interwell Limit	48	Intrawell Limit	10.0
U	2	Interwell Limit	48	Intrawell Limit	10.0
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U	2	Interwell Limit	48	Intrawell Limit	10.0
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U	2	Interwell Limit	48	Intrawell Limit	10.0
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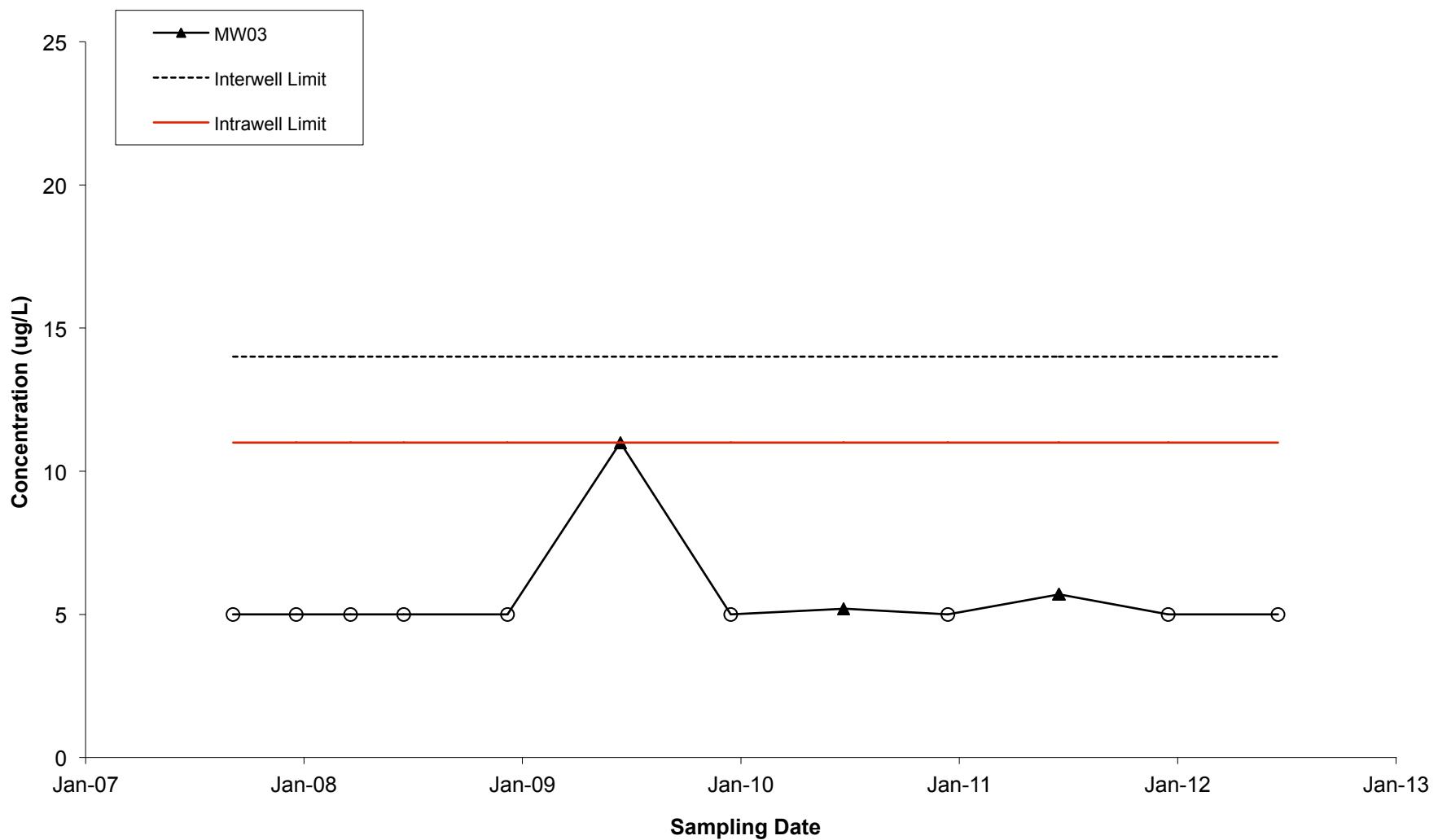
**1,1,1-Trichloroethane in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



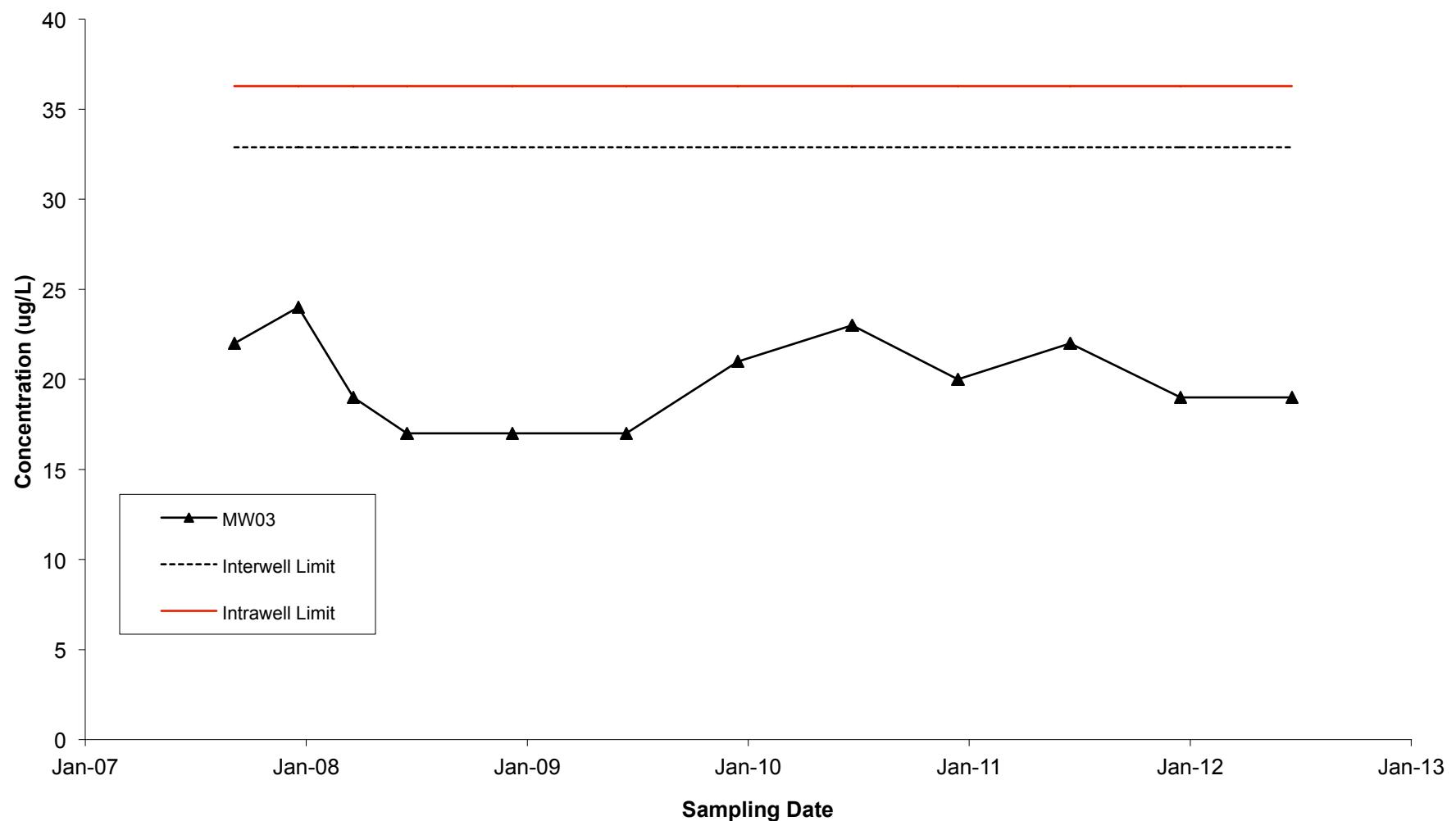
**1,1-Dichloroethane in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



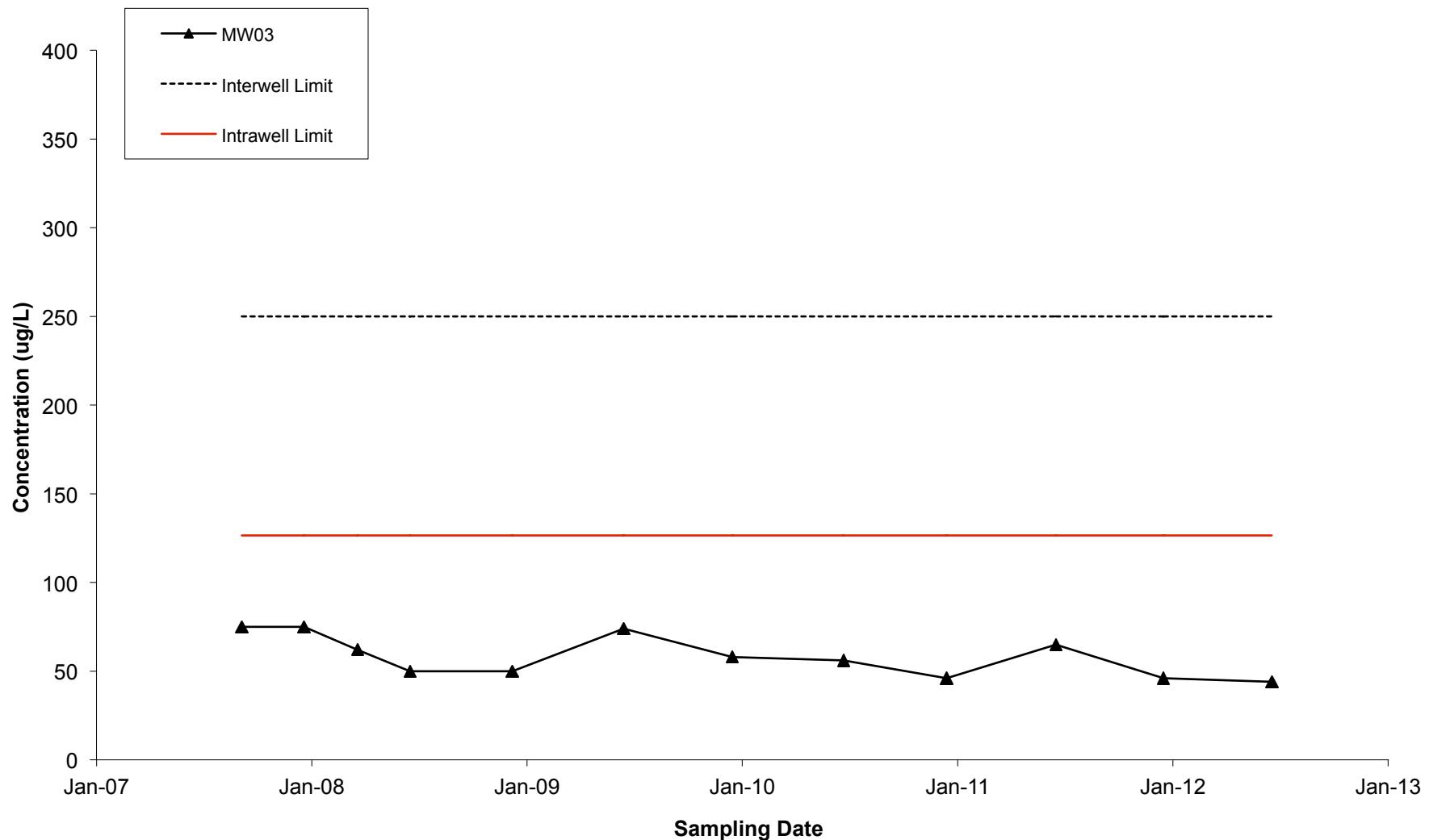
**1,1-Dichloroethene in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



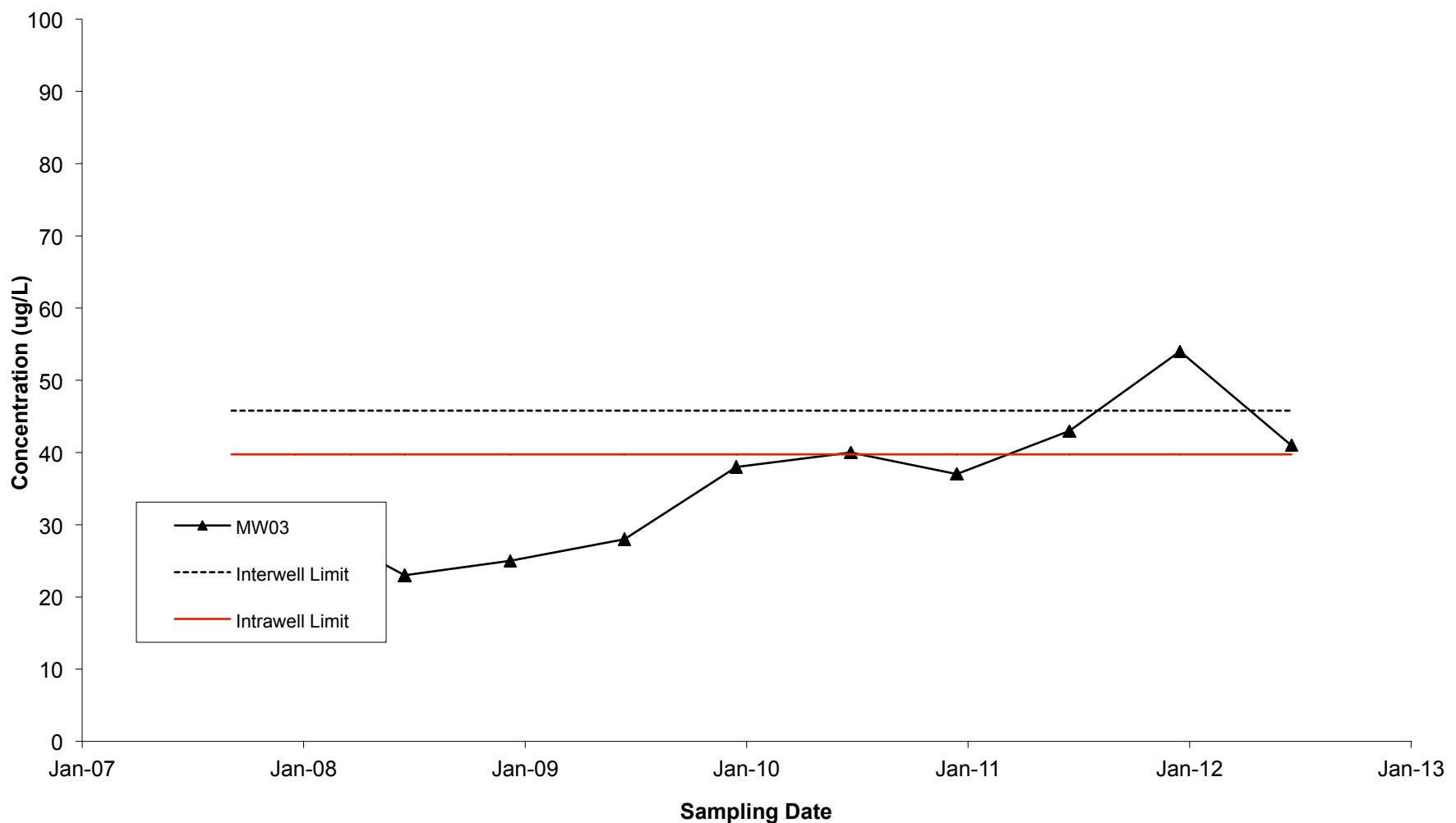
**cis-1,2-Dichloroethene in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



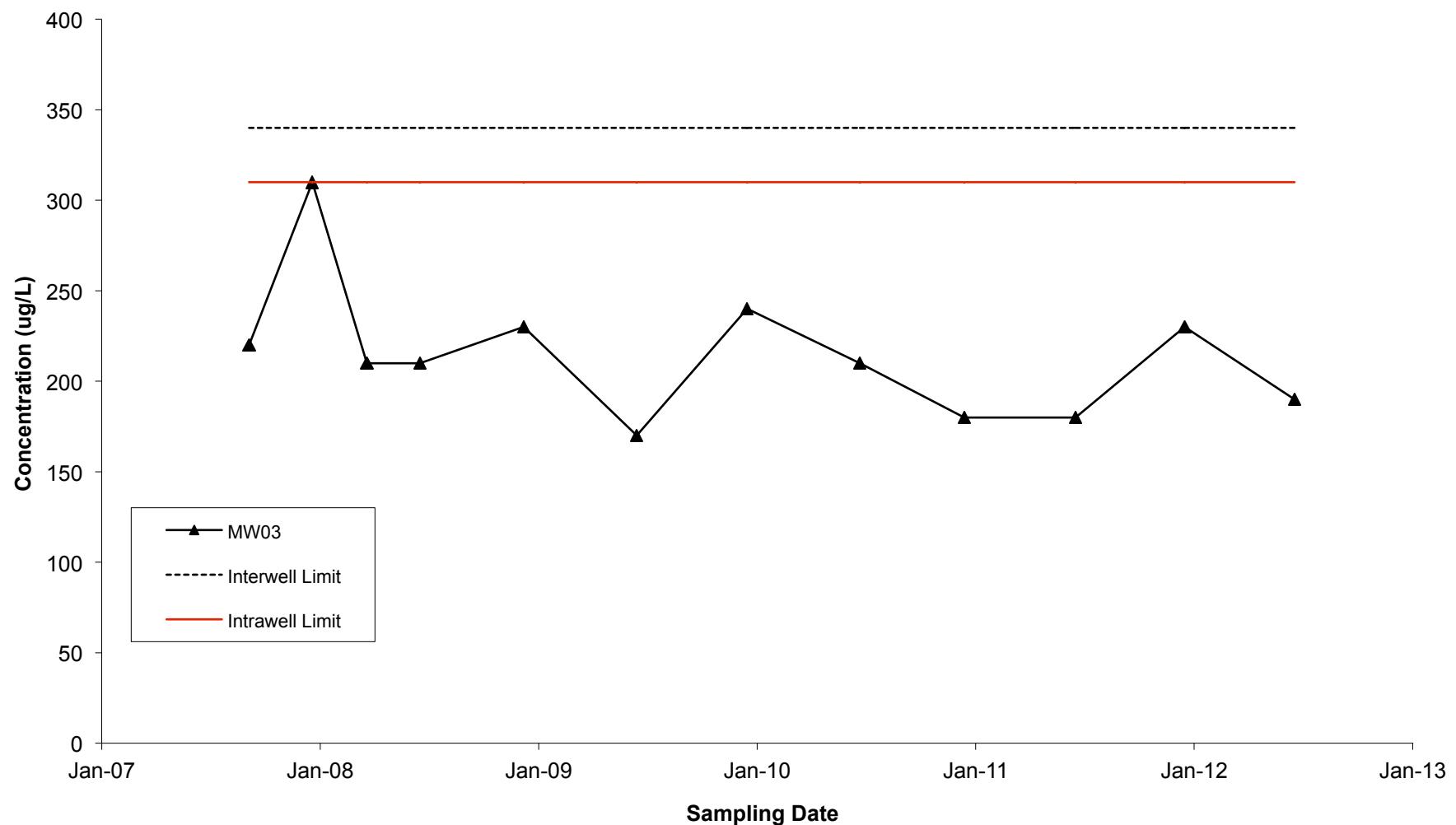
**Tetrachloroethene in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



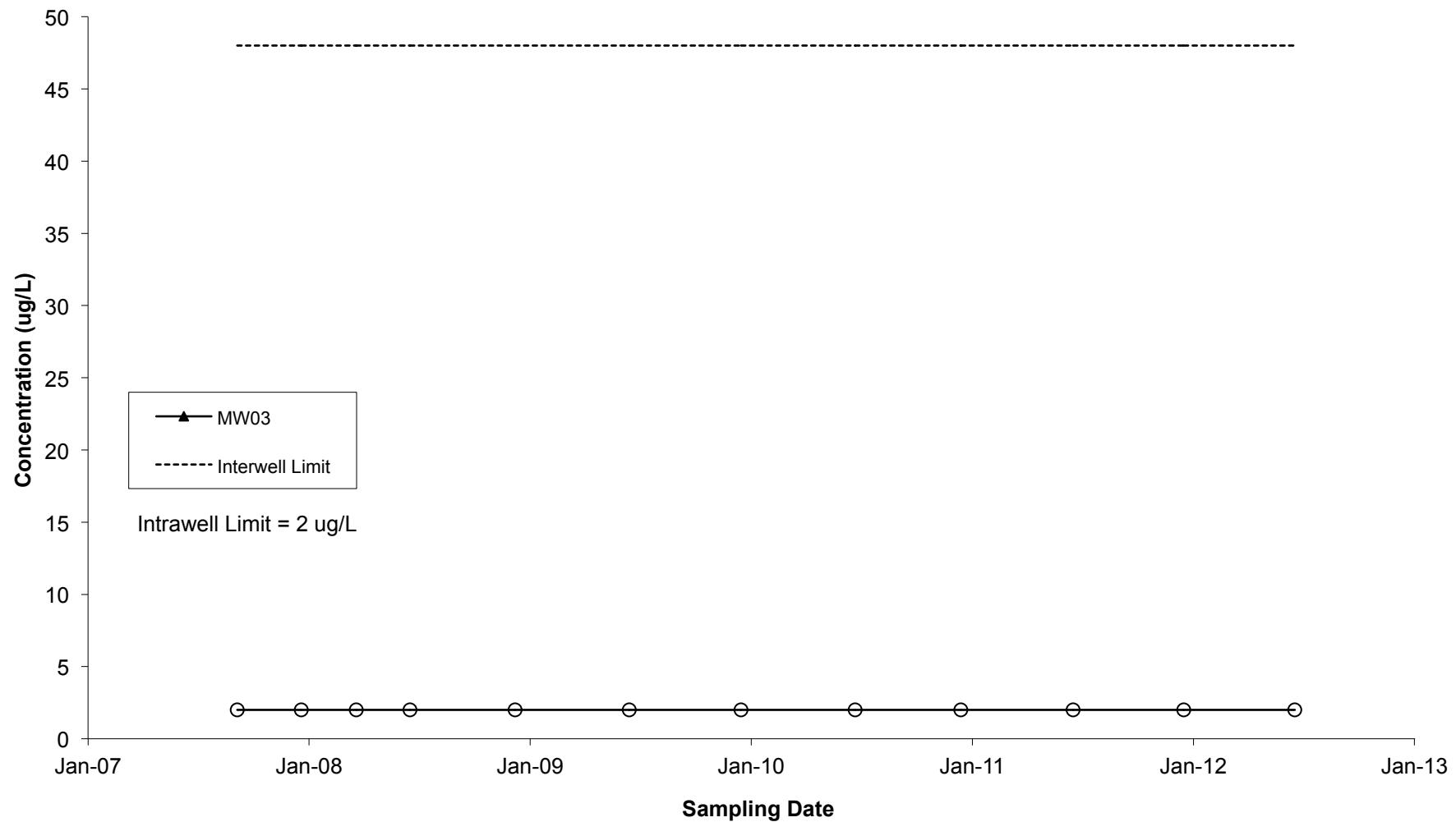
**Trichloroethene in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



**Vinyl Chloride in Well MW03**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are marked  
with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Sep-07	ug/L	29
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Dec-07	ug/L	30
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Mar-08	ug/L	28
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Jun-08	ug/L	22
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Dec-08	ug/L	22
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Jun-09	ug/L	21
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Dec-09	ug/L	27
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Jun-10	ug/L	24
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Dec-10	ug/L	22
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	Jun-11	ug/L	24
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	12/20/11	ug/L	18
IPC/Roto-Rooter	MW03	190494	1,1,1-Trichloroethane	6/21/12	ug/L	19
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Dec-07	ug/L	5.0
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Jun-08	ug/L	5.0
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Dec-08	ug/L	5.0
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Jun-09	ug/L	11
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Jun-10	ug/L	5.2
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Dec-10	ug/L	5
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	Jun-11	ug/L	5.7
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	12/20/11	ug/L	5
IPC/Roto-Rooter	MW03	190504	1,1-Dichloroethane	6/21/12	ug/L	5
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Sep-07	ug/L	22
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Dec-07	ug/L	24
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Mar-08	ug/L	19
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Jun-08	ug/L	17
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Dec-08	ug/L	17
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Jun-09	ug/L	17
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Dec-09	ug/L	21
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Jun-10	ug/L	23
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Dec-10	ug/L	20
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	Jun-11	ug/L	22
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	12/20/11	ug/L	19
IPC/Roto-Rooter	MW03	190499	1,1-Dichloroethene	6/21/12	ug/L	19
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Sep-07	ug/L	75
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Dec-07	ug/L	75
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Mar-08	ug/L	62
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Jun-08	ug/L	50
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Dec-08	ug/L	50
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	74
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	58
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	56
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	46
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	65
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	46
IPC/Roto-Rooter	MW03	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	44
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Sep-07	ug/L	24
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Dec-07	ug/L	29
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Mar-08	ug/L	27
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Jun-08	ug/L	23

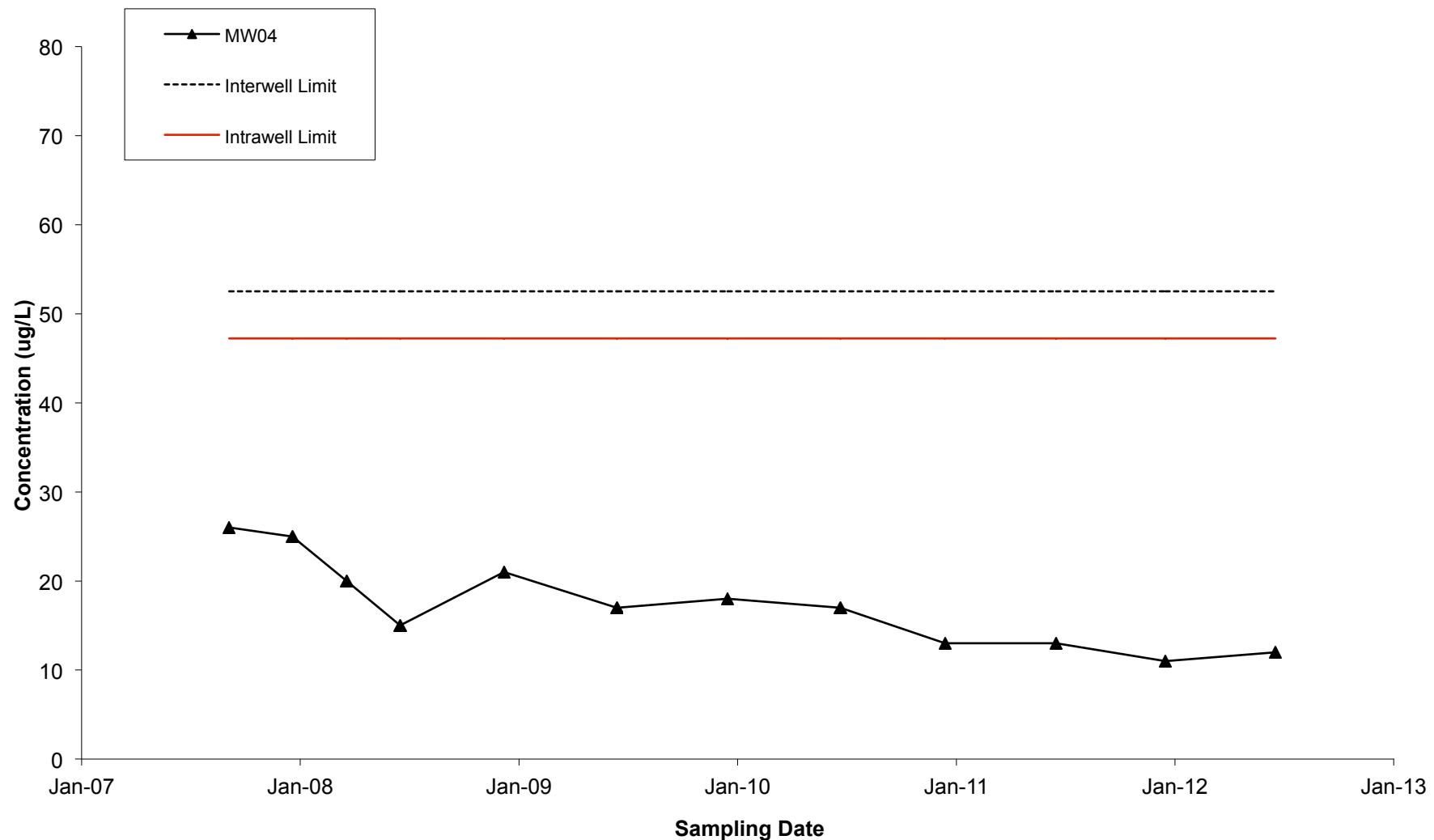
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Dec-08	ug/L	25
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Jun-09	ug/L	28
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Dec-09	ug/L	38
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Jun-10	ug/L	40
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Dec-10	ug/L	37
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	Jun-11	ug/L	43
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	12/20/11	ug/L	54
IPC/Roto-Rooter	MW03	190525	Tetrachloroethene	6/21/12	ug/L	41
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Sep-07	ug/L	220
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Dec-07	ug/L	310
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Mar-08	ug/L	210
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Jun-08	ug/L	210
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Dec-08	ug/L	230
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Jun-09	ug/L	170
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Dec-09	ug/L	240
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Jun-10	ug/L	210
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Dec-10	ug/L	180
IPC/Roto-Rooter	MW03	185820	Trichloroethene	Jun-11	ug/L	180
IPC/Roto-Rooter	MW03	185820	Trichloroethene	12/20/11	ug/L	230
IPC/Roto-Rooter	MW03	185820	Trichloroethene	6/21/12	ug/L	190
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Sep-07	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Dec-07	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Mar-08	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Jun-08	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Dec-08	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Jun-09	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Dec-09	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Jun-10	ug/L	2.0
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Dec-10	ug/L	2
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	Jun-11	ug/L	2
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	12/20/11	ug/L	2
IPC/Roto-Rooter	MW03	185825	Vinyl Chloride	6/21/12	ug/L	2





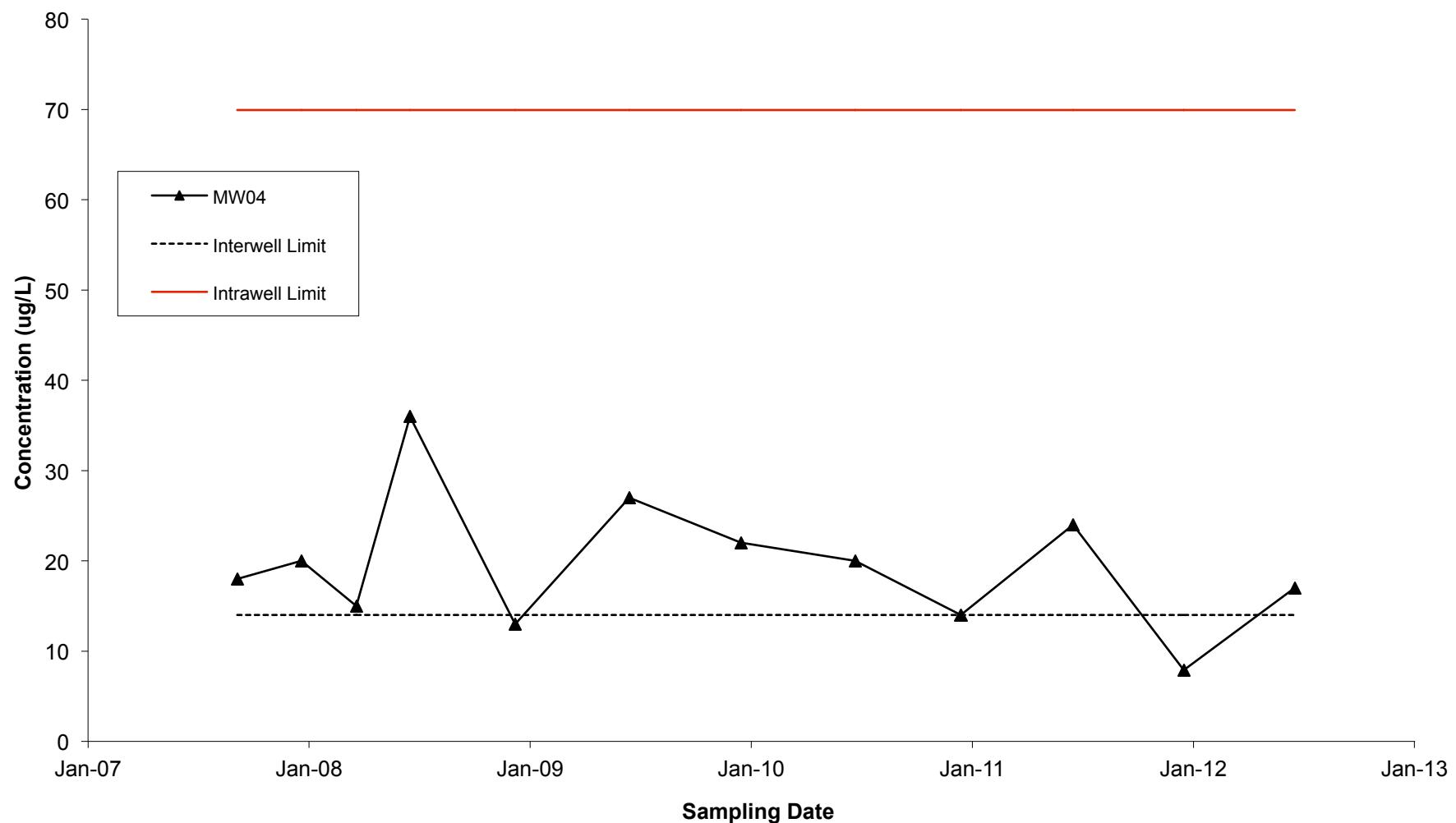
**1,1,1-Trichloroethane in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



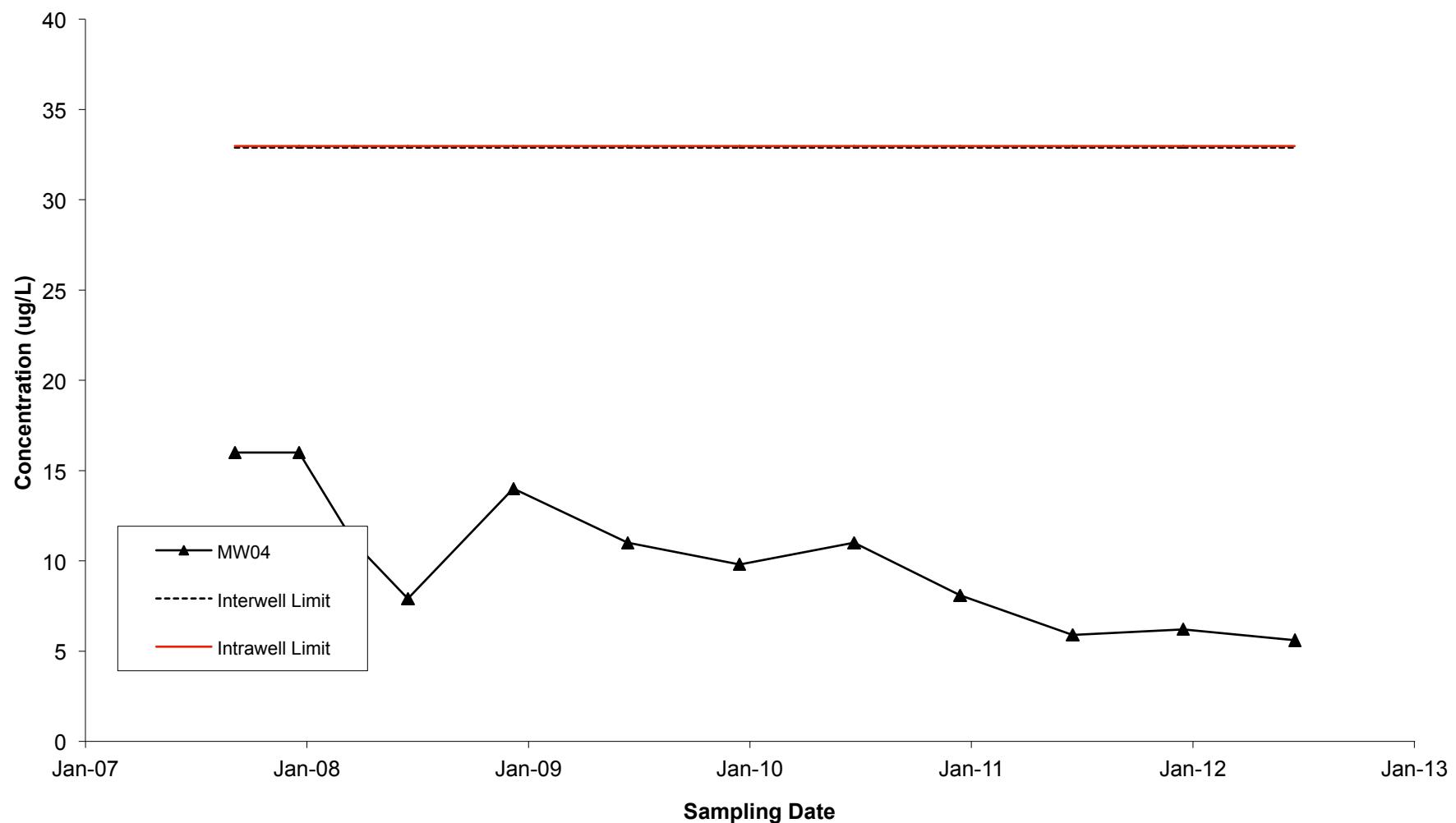
**1,1-Dichloroethane in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



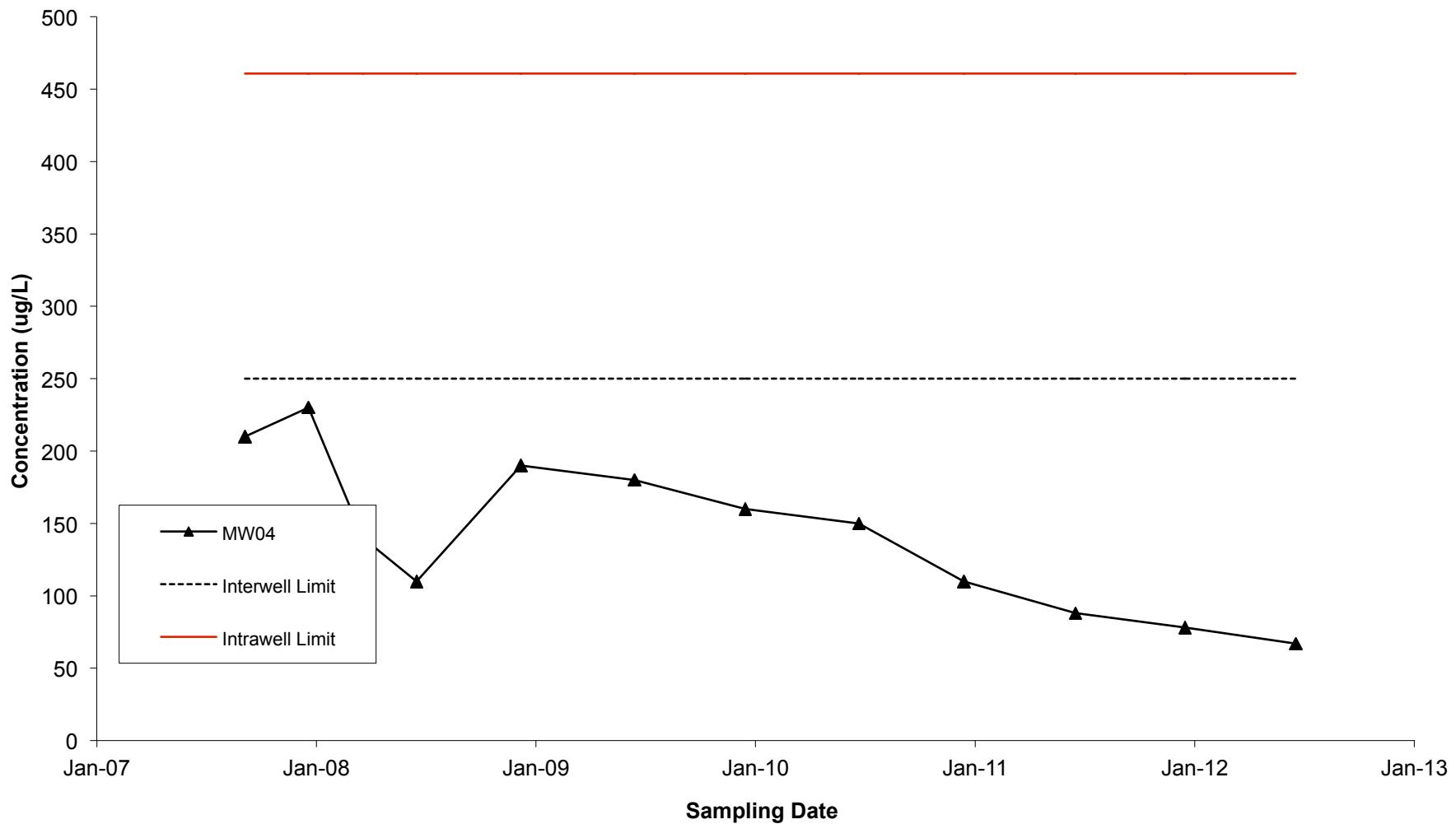
**1,1-Dichloroethene in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



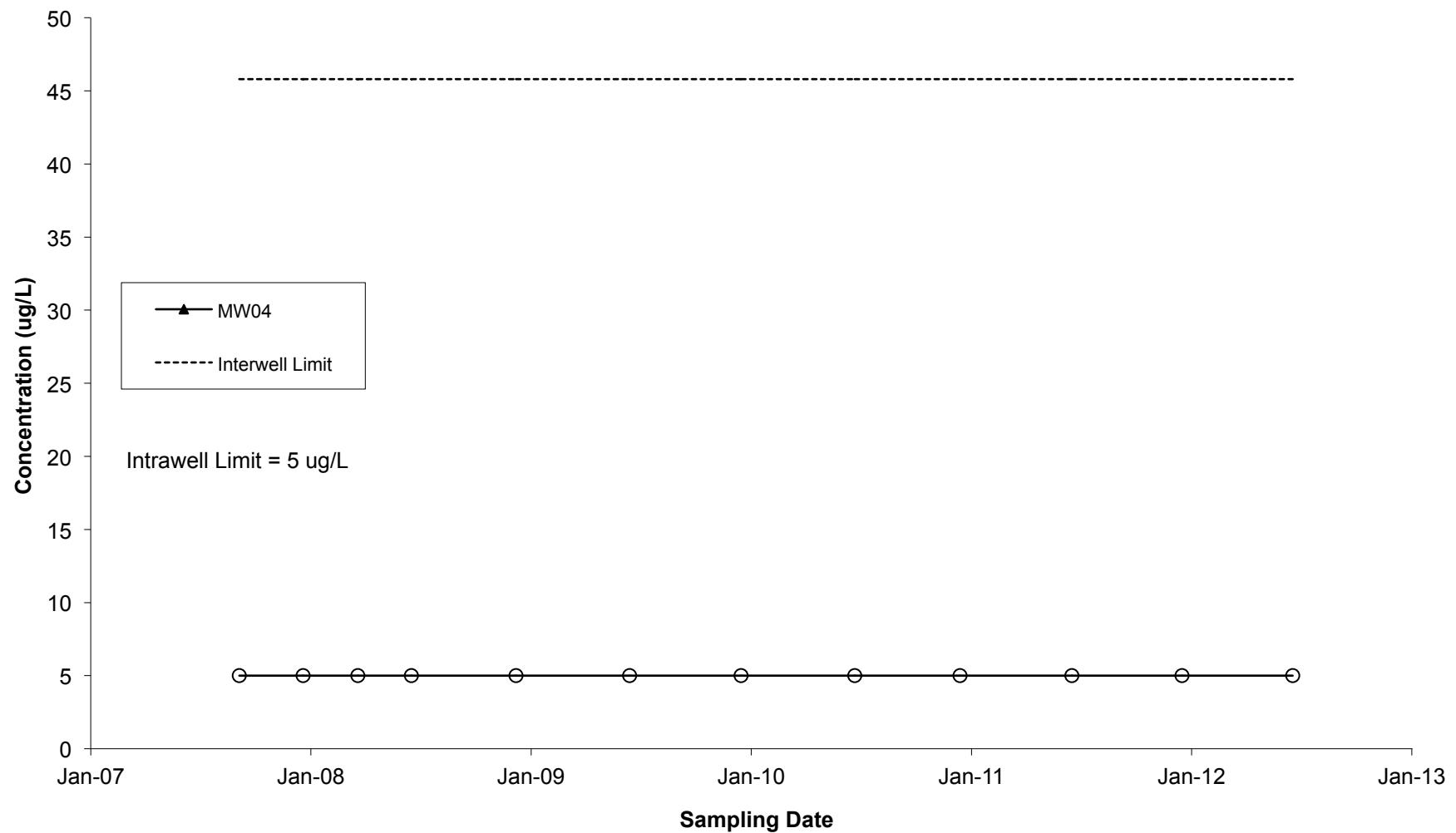
**cis-1,2-Dichloroethene in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



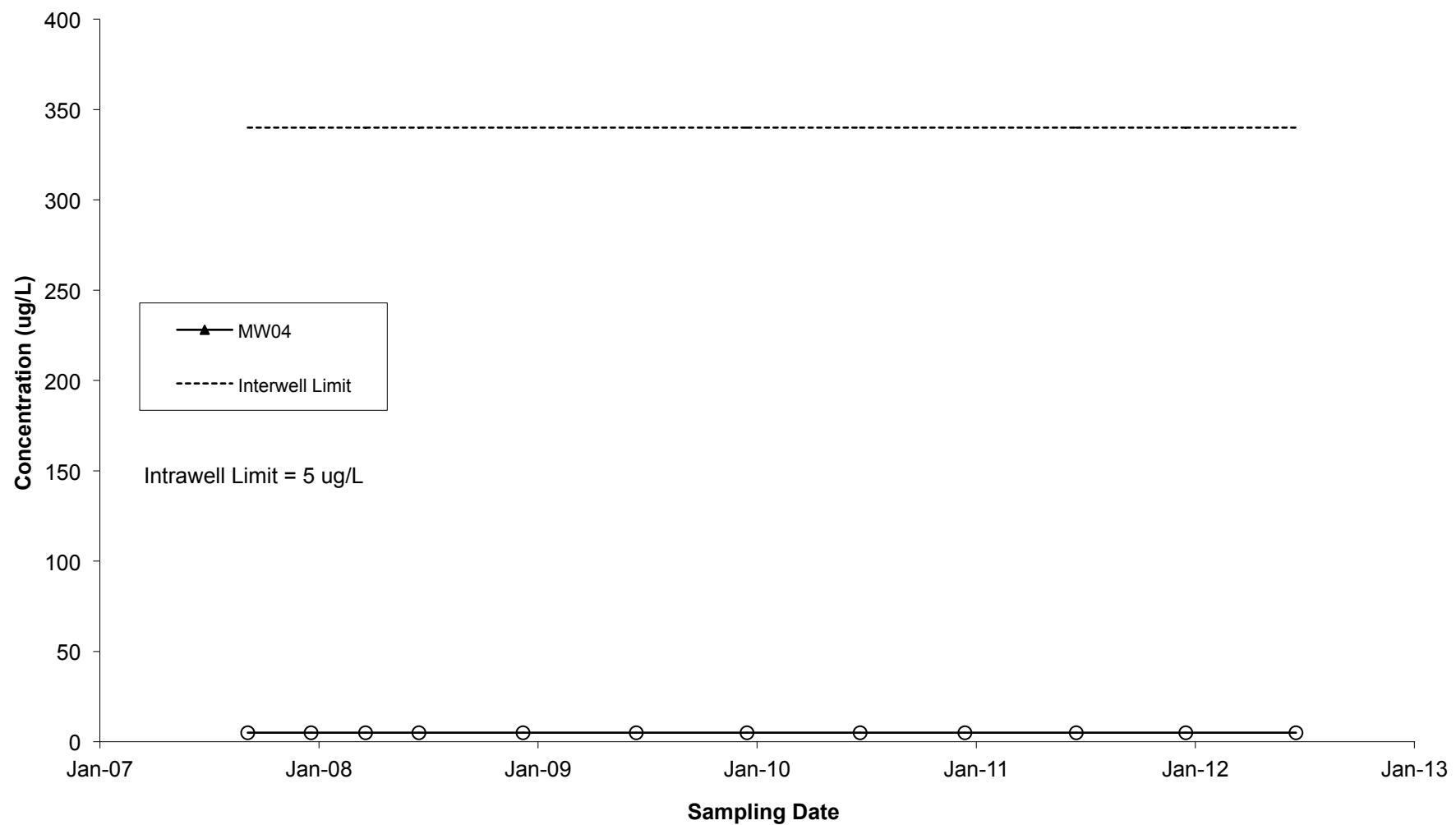
**Tetrachloroethene in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



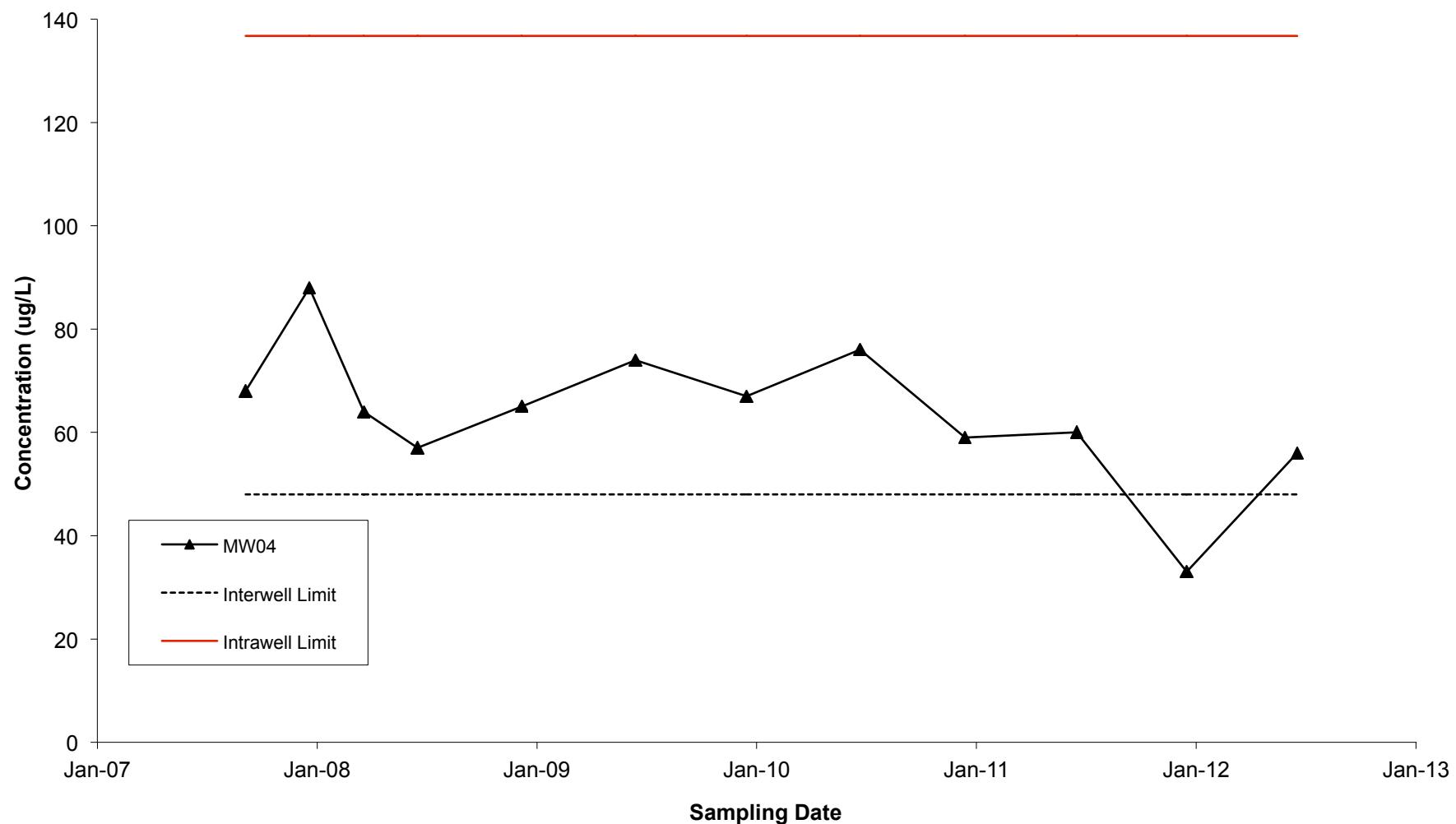
**Trichloroethene in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



**Vinyl Chloride in Well MW04**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Sep-07	ug/L	26
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Dec-07	ug/L	25
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Mar-08	ug/L	20
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Jun-08	ug/L	15
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Dec-08	ug/L	21
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Jun-09	ug/L	17
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Dec-09	ug/L	18
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Jun-10	ug/L	17
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Dec-10	ug/L	13
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	Jun-11	ug/L	13
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	12/20/11	ug/L	11
IPC/Roto-Rooter	MW04	190494	1,1,1-Trichloroethane	6/21/12	ug/L	12
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Sep-07	ug/L	18
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Dec-07	ug/L	20
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Mar-08	ug/L	15
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Jun-08	ug/L	36
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Dec-08	ug/L	13
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Jun-09	ug/L	27
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Dec-09	ug/L	22
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Jun-10	ug/L	20
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Dec-10	ug/L	14
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	Jun-11	ug/L	24
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	12/20/11	ug/L	7.9
IPC/Roto-Rooter	MW04	190504	1,1-Dichloroethane	6/21/12	ug/L	17
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Sep-07	ug/L	16
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Dec-07	ug/L	16
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Mar-08	ug/L	11
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Jun-08	ug/L	7.9
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Dec-08	ug/L	14
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Jun-09	ug/L	11
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Dec-09	ug/L	9.8
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Jun-10	ug/L	11
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Dec-10	ug/L	8.1
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	Jun-11	ug/L	5.9
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	12/20/11	ug/L	6.2
IPC/Roto-Rooter	MW04	190499	1,1-Dichloroethene	6/21/12	ug/L	5.6
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Sep-07	ug/L	210
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Dec-07	ug/L	230
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Mar-08	ug/L	140
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Jun-08	ug/L	110
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Dec-08	ug/L	190
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	180
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	160
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	150
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	110
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	88
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	78
IPC/Roto-Rooter	MW04	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	67
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Dec-07	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Jun-08	ug/L	5.0

IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Dec-08	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	12/20/11	ug/L	5
IPC/Roto-Rooter	MW04	190525	Tetrachloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Dec-07	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Jun-08	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Dec-08	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW04	185820	Trichloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW04	185820	Trichloroethene	12/20/11	ug/L	5
IPC/Roto-Rooter	MW04	185820	Trichloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Sep-07	ug/L	68
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Dec-07	ug/L	88
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Mar-08	ug/L	64
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Jun-08	ug/L	57
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Dec-08	ug/L	65
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Jun-09	ug/L	74
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Dec-09	ug/L	67
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Jun-10	ug/L	76
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Dec-10	ug/L	59
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	Jun-11	ug/L	60
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	12/20/11	ug/L	33
IPC/Roto-Rooter	MW04	185825	Vinyl Chloride	6/21/12	ug/L	56

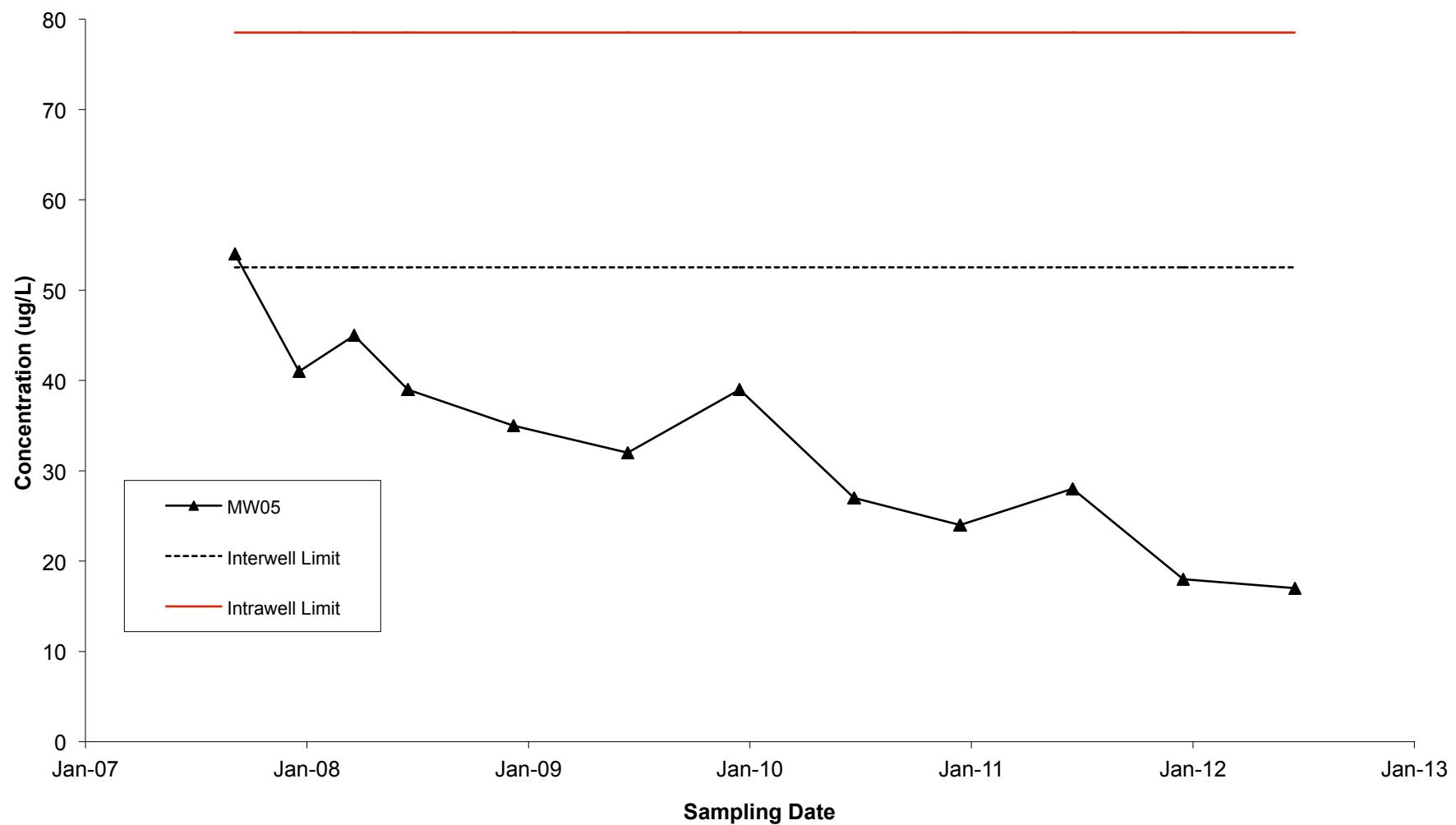
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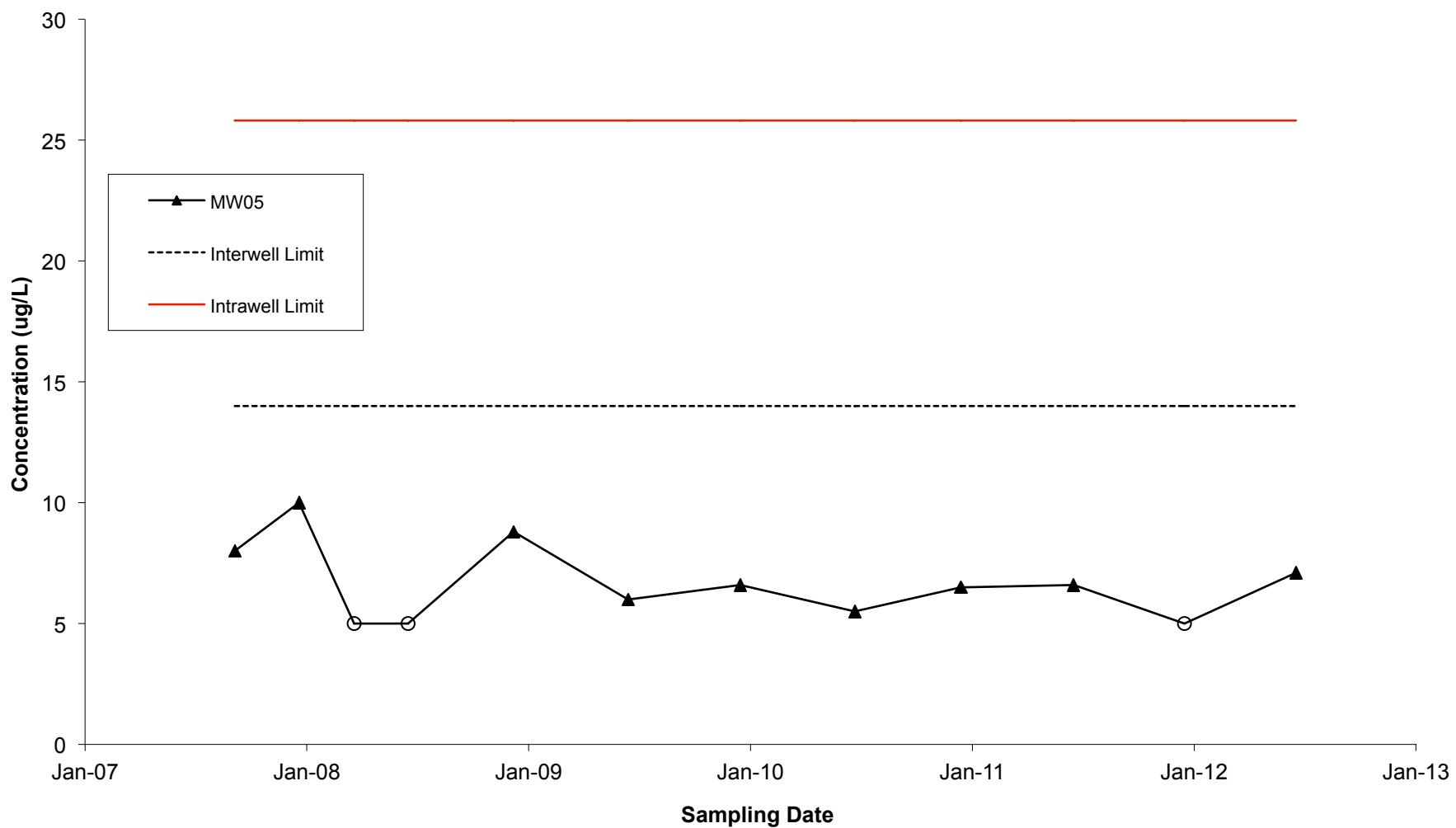
**1,1,1-Trichloroethane in Well MW05  
IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



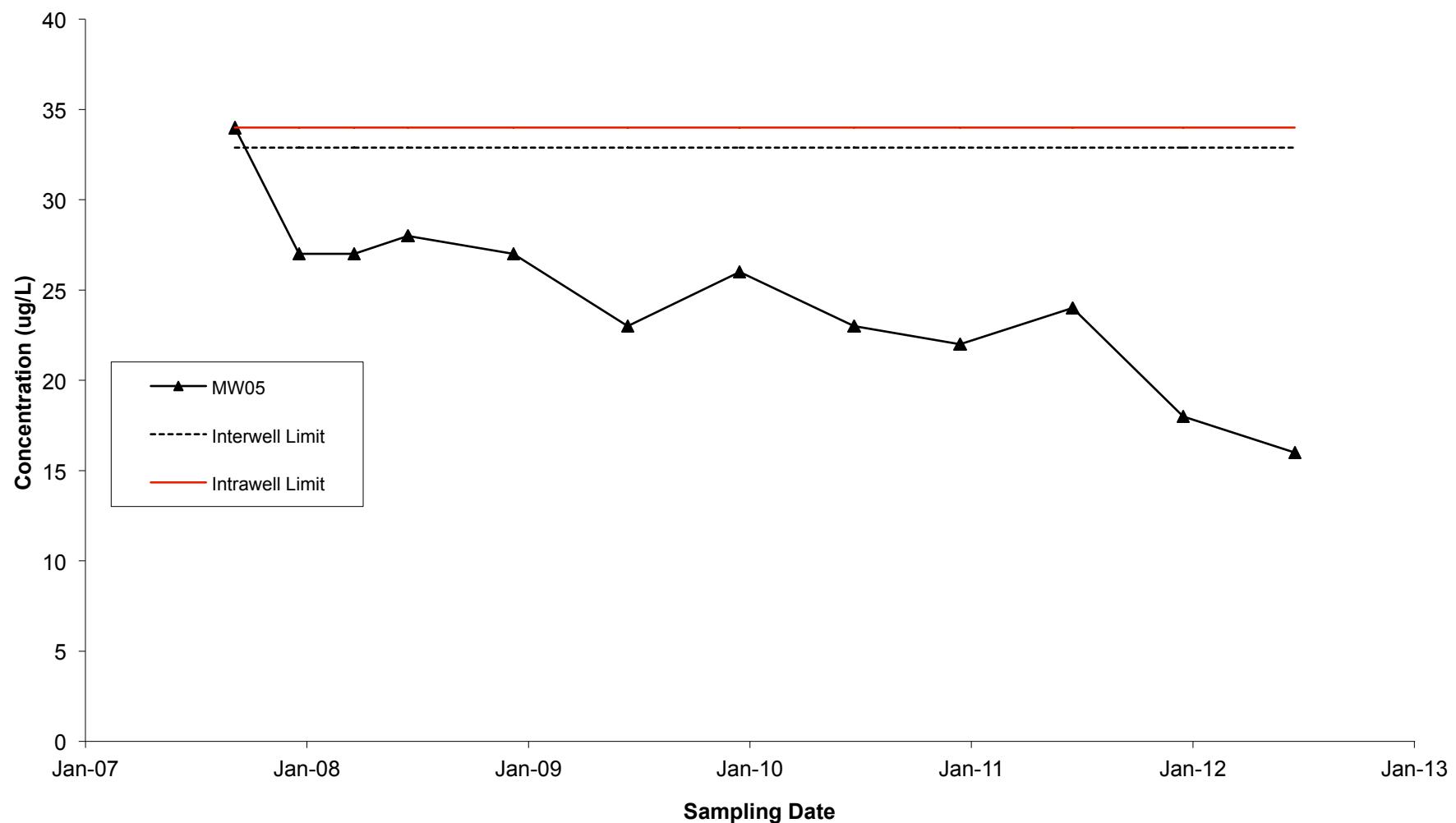
**1,1-Dichloroethane in Well MW05  
IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



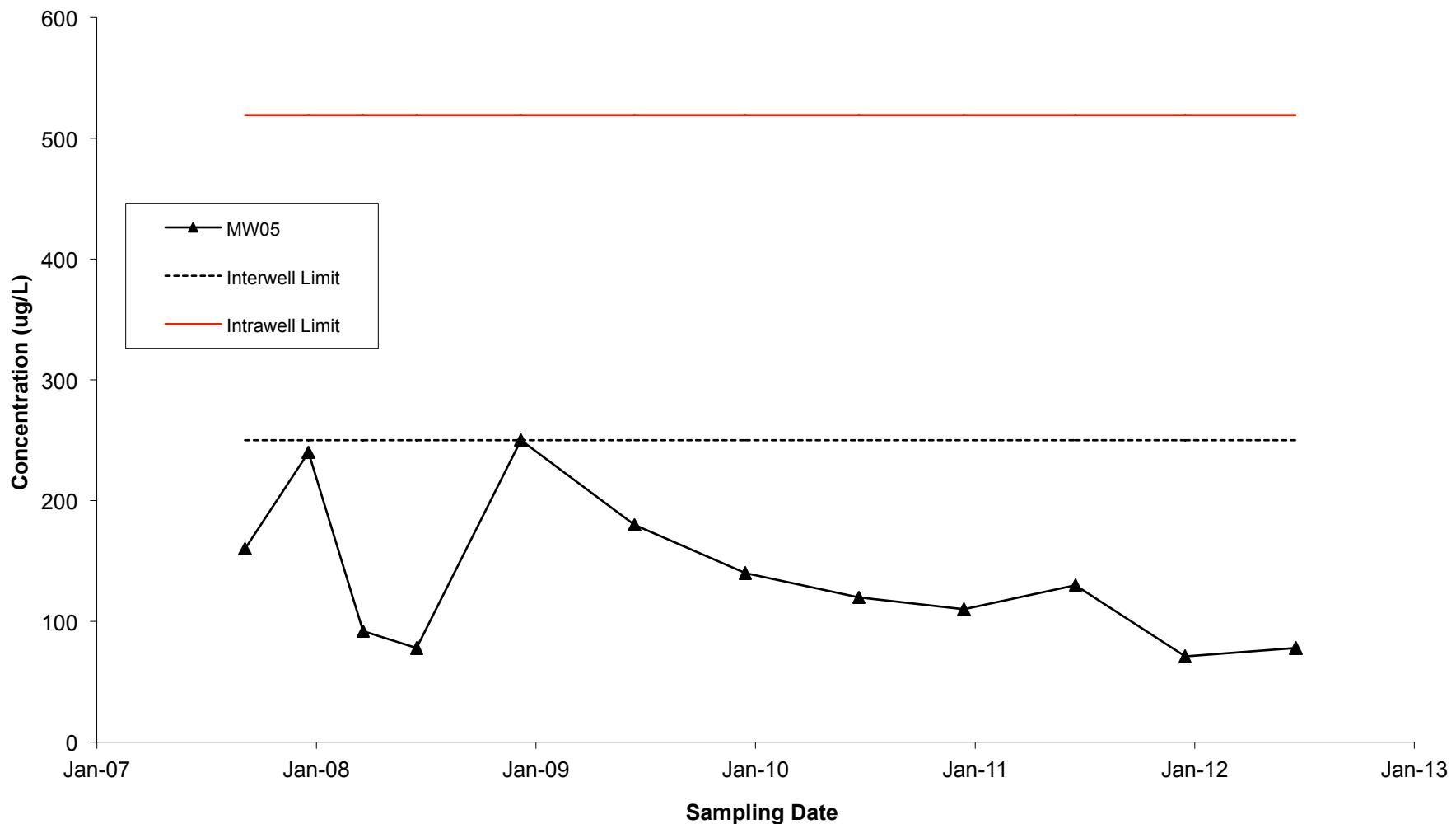
**1,1-Dichloroethene in Well MW05**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



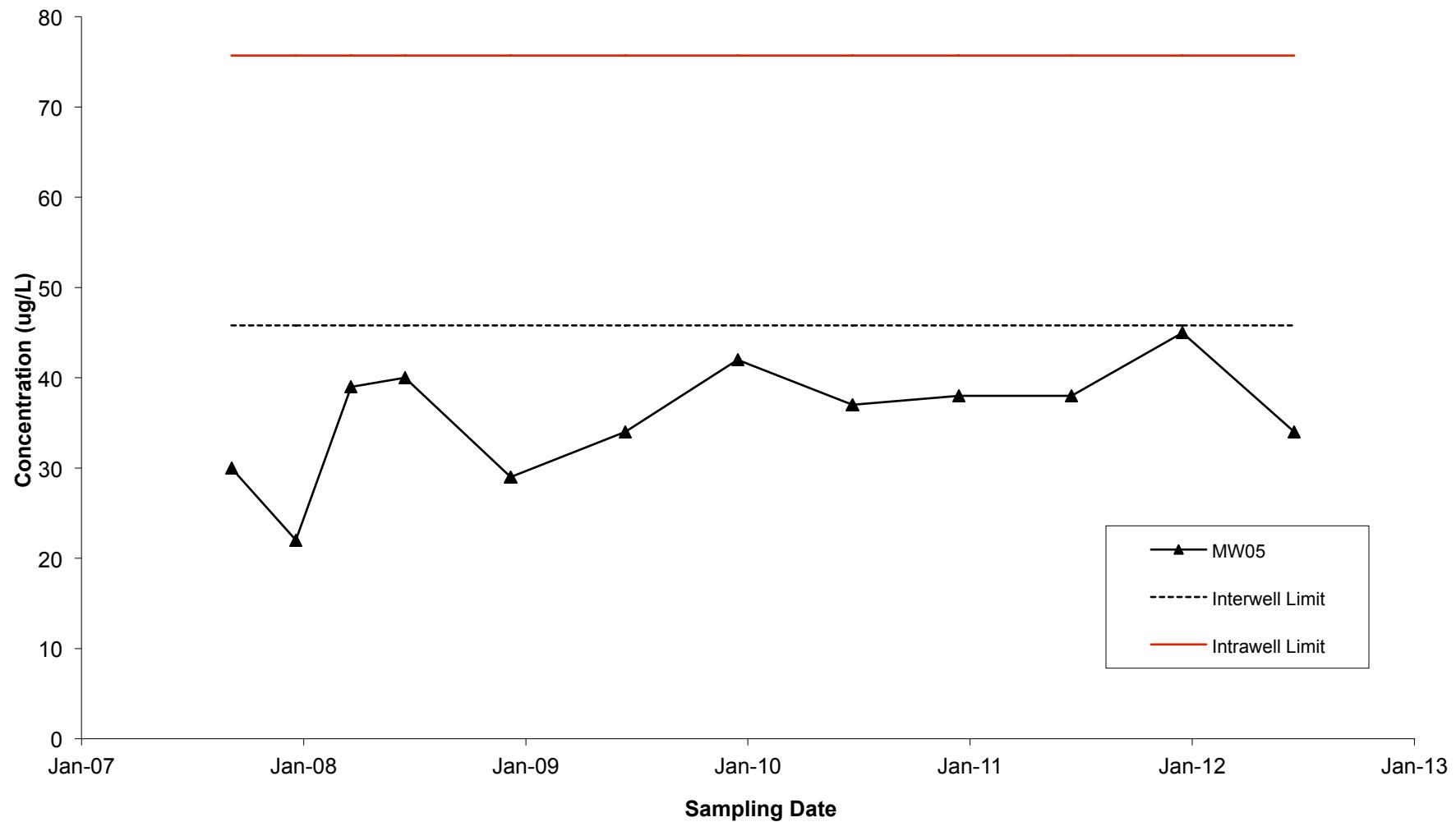
**cis-1,2-Dichloroethene in Well MW05**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



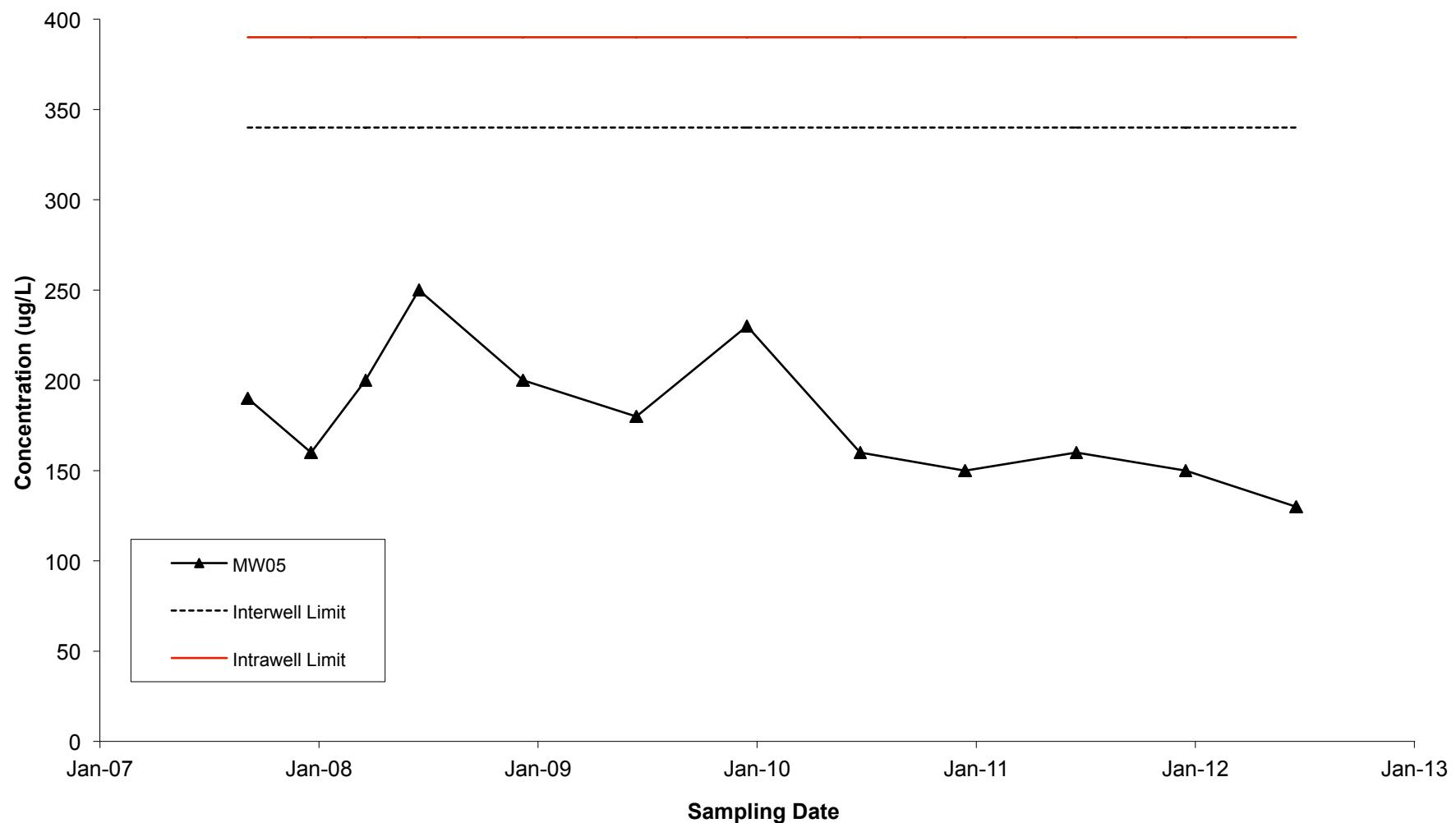
**Tetrachloroethene in Well MW05**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



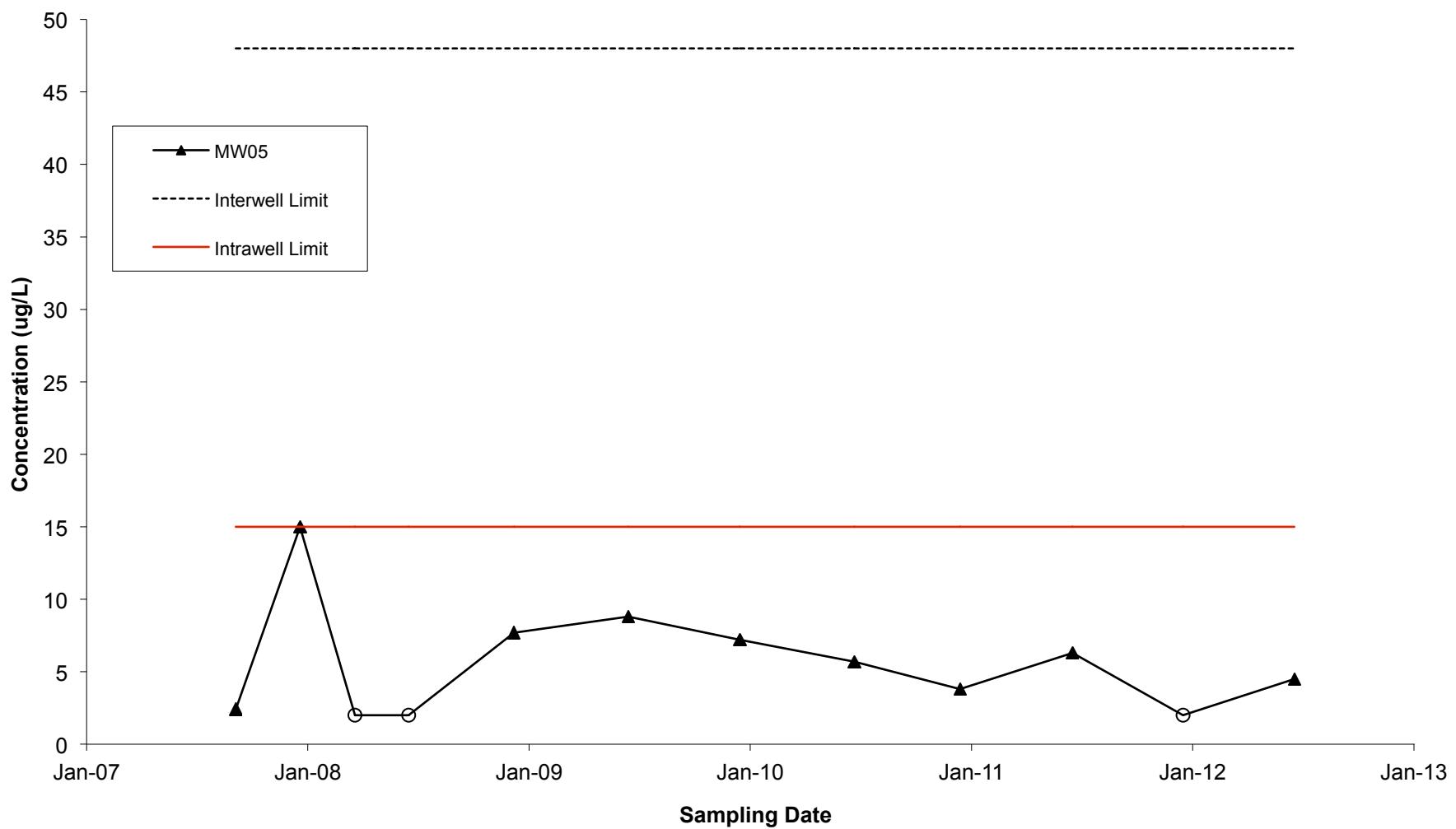
**Trichloroethene in Well MW05**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



## Vinyl Chloride in Well MW05 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Sep-07	ug/L	54
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Dec-07	ug/L	41
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Mar-08	ug/L	45
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Jun-08	ug/L	39
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Dec-08	ug/L	35
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Jun-09	ug/L	32
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Dec-09	ug/L	39
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Jun-10	ug/L	27
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Dec-10	ug/L	24
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	Jun-11	ug/L	28
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	12/20/11	ug/L	18
IPC/Roto-Rooter	MW05	190494	1,1,1-Trichloroethane	6/21/12	ug/L	17
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Sep-07	ug/L	8.0
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Dec-07	ug/L	10
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Jun-08	ug/L	5.0
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Dec-08	ug/L	8.8
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Jun-09	ug/L	6.0
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Dec-09	ug/L	6.6
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Jun-10	ug/L	5.5
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Dec-10	ug/L	6.5
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	Jun-11	ug/L	6.6
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	12/20/11	ug/L	5
IPC/Roto-Rooter	MW05	190504	1,1-Dichloroethane	6/21/12	ug/L	7.1
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Sep-07	ug/L	34
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Dec-07	ug/L	27
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Mar-08	ug/L	27
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Jun-08	ug/L	28
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Dec-08	ug/L	27
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Jun-09	ug/L	23
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Dec-09	ug/L	26
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Jun-10	ug/L	23
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Dec-10	ug/L	22
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	Jun-11	ug/L	24
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	12/20/11	ug/L	18
IPC/Roto-Rooter	MW05	190499	1,1-Dichloroethene	6/21/12	ug/L	16
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Sep-07	ug/L	160
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Dec-07	ug/L	240
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Mar-08	ug/L	92
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Jun-08	ug/L	78
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Dec-08	ug/L	250
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	180
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	140
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	120
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	110
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	130
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	71
IPC/Roto-Rooter	MW05	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	78
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Sep-07	ug/L	30
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Dec-07	ug/L	22
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Mar-08	ug/L	39
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Jun-08	ug/L	40

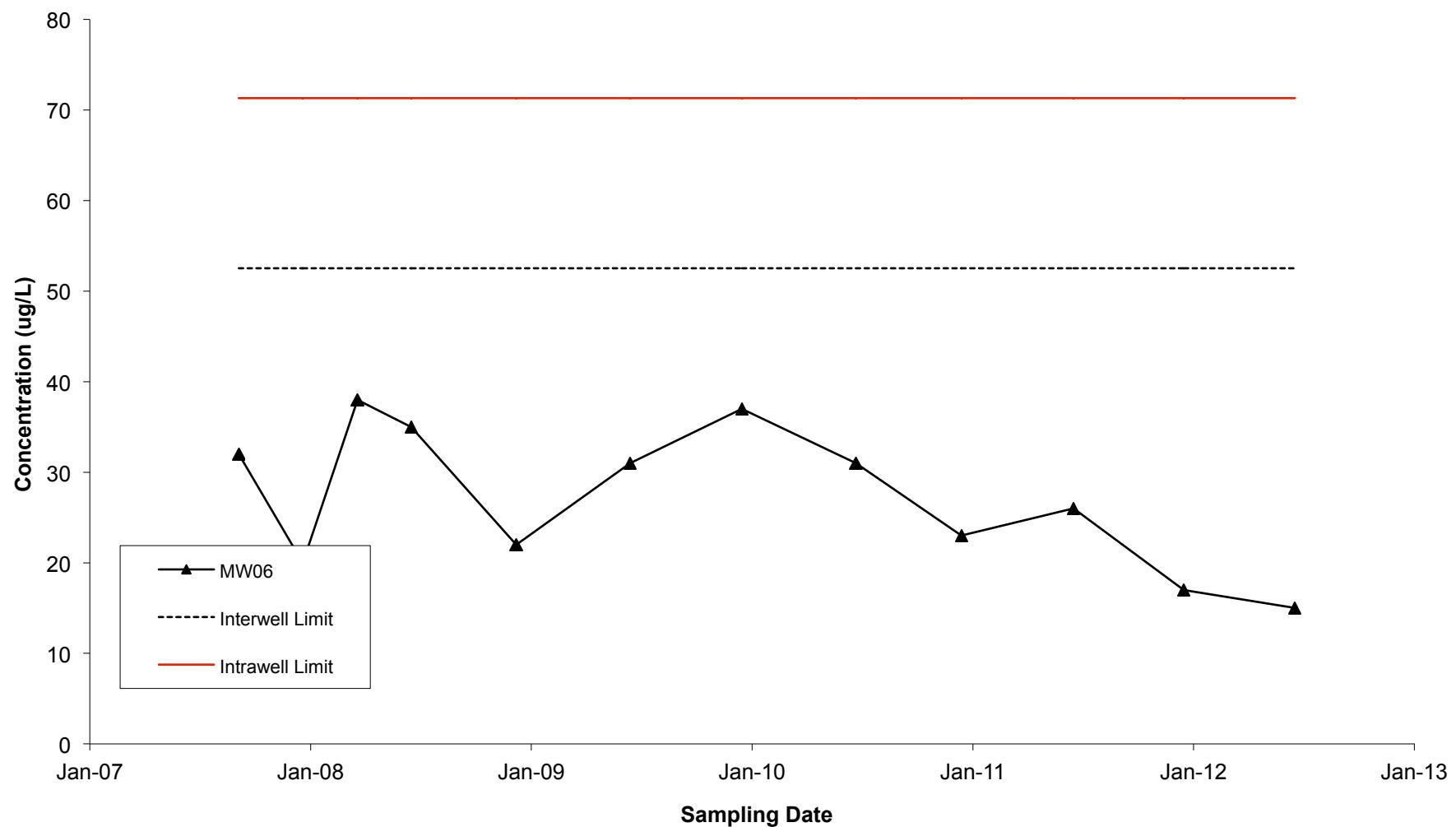
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Dec-08	ug/L	29
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Jun-09	ug/L	34
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Dec-09	ug/L	42
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Jun-10	ug/L	37
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Dec-10	ug/L	38
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	Jun-11	ug/L	38
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	12/20/11	ug/L	45
IPC/Roto-Rooter	MW05	190525	Tetrachloroethene	6/21/12	ug/L	34
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Sep-07	ug/L	190
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Dec-07	ug/L	160
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Mar-08	ug/L	200
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Jun-08	ug/L	250
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Dec-08	ug/L	200
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Jun-09	ug/L	180
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Dec-09	ug/L	230
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Jun-10	ug/L	160
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Dec-10	ug/L	150
IPC/Roto-Rooter	MW05	185820	Trichloroethene	Jun-11	ug/L	160
IPC/Roto-Rooter	MW05	185820	Trichloroethene	12/20/11	ug/L	150
IPC/Roto-Rooter	MW05	185820	Trichloroethene	6/21/12	ug/L	130
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Sep-07	ug/L	2.4
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Dec-07	ug/L	15
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Mar-08	ug/L	2.0
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Jun-08	ug/L	2.0
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Dec-08	ug/L	7.7
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Jun-09	ug/L	8.8
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Dec-09	ug/L	7.2
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Jun-10	ug/L	5.7
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Dec-10	ug/L	3.8
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	Jun-11	ug/L	6.3
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	12/20/11	ug/L	2
IPC/Roto-Rooter	MW05	185825	Vinyl Chloride	6/21/12	ug/L	4.5



	5	Interwell Limit	45.8	Intrawell Limit	75.7
	5	Interwell Limit	45.8	Intrawell Limit	75.7
	5	Interwell Limit	45.8	Intrawell Limit	75.7
	5	Interwell Limit	45.8	Intrawell Limit	75.7
	5	Interwell Limit	45.8	Intrawell Limit	75.7
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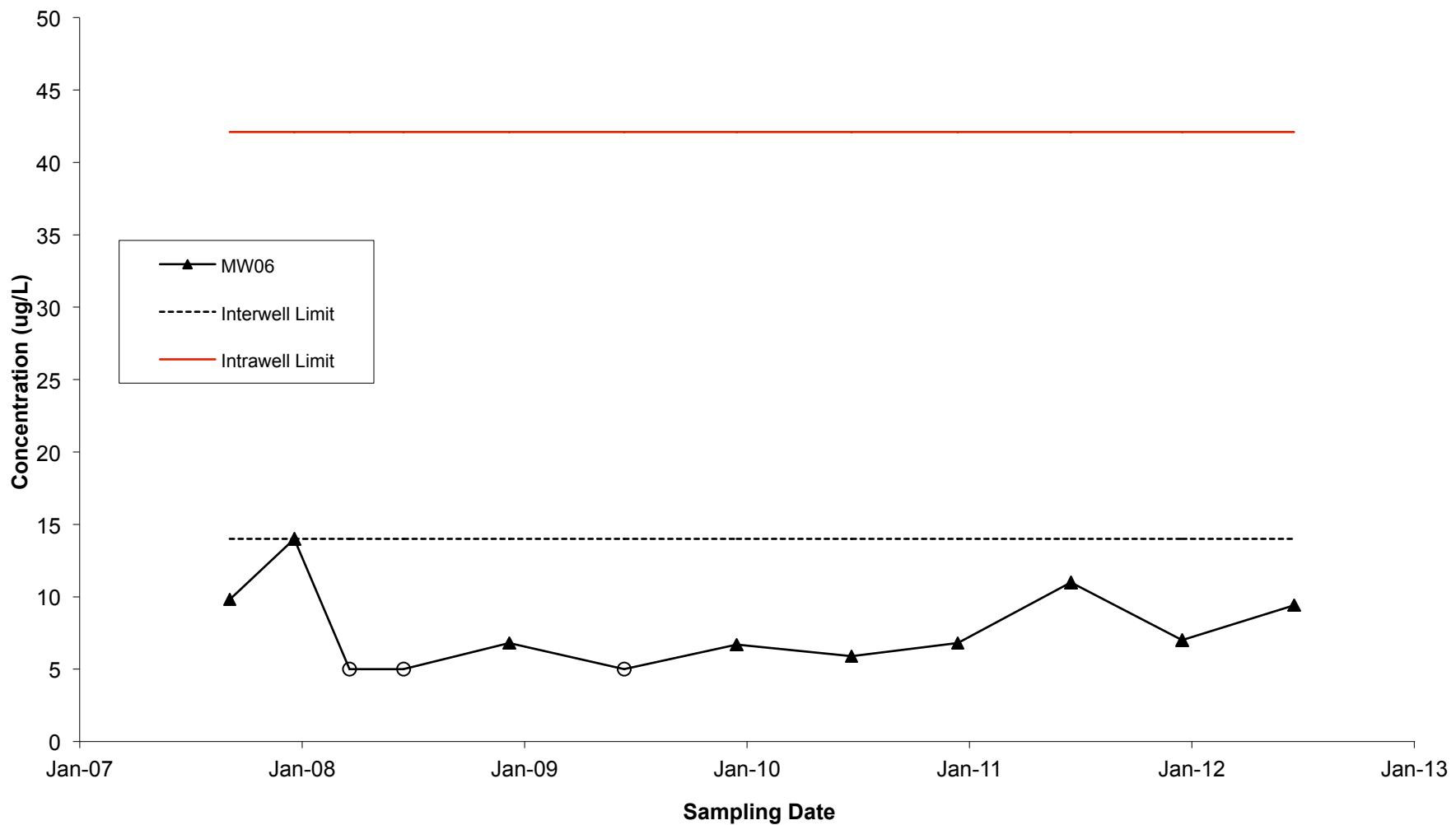
**1,1,1-Trichloroethane in Well MW06**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



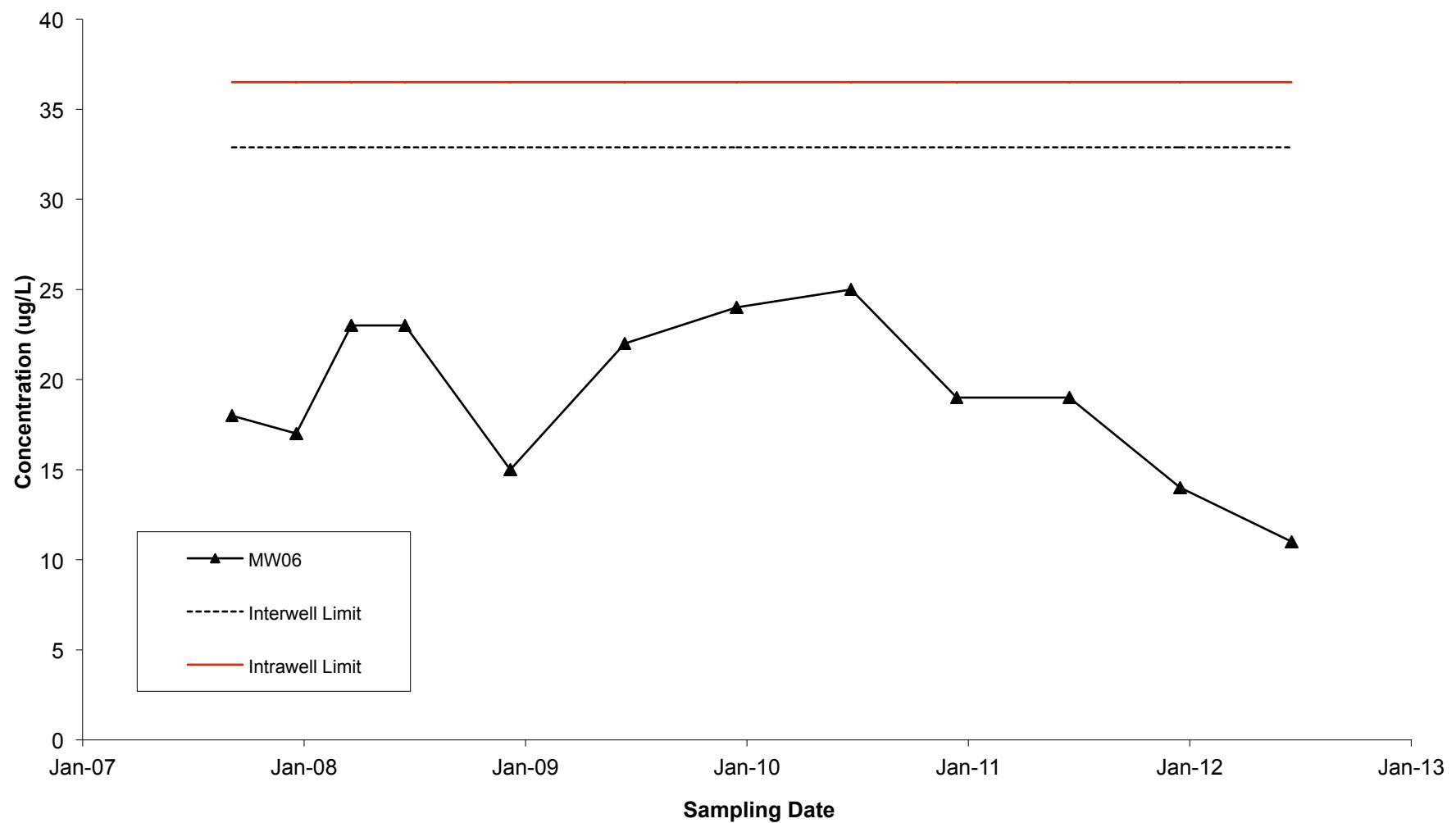
**1,1-Dichloroethane in Well MW06**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



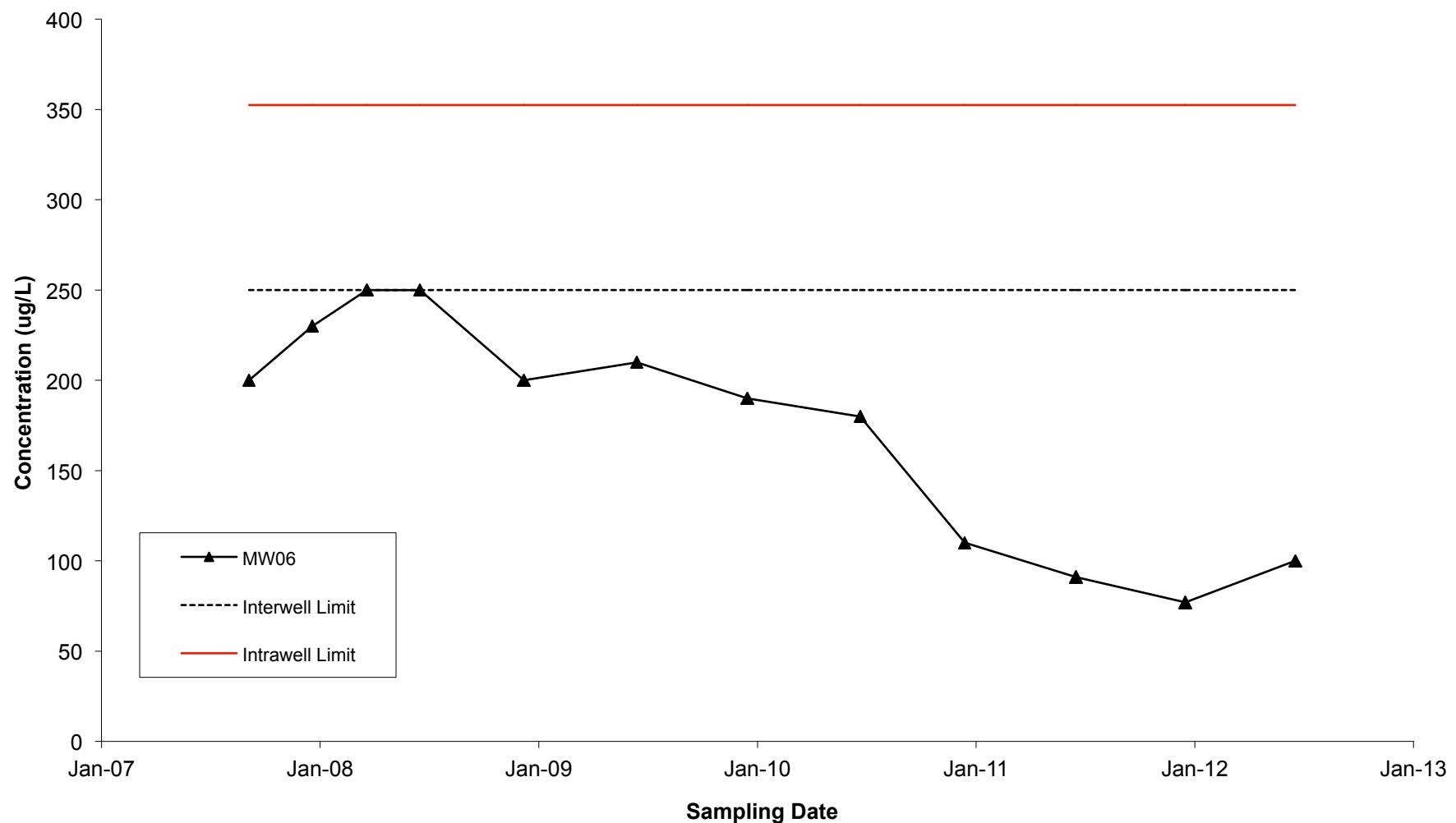
**1,1-Dichloroethene in Well MW06  
IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



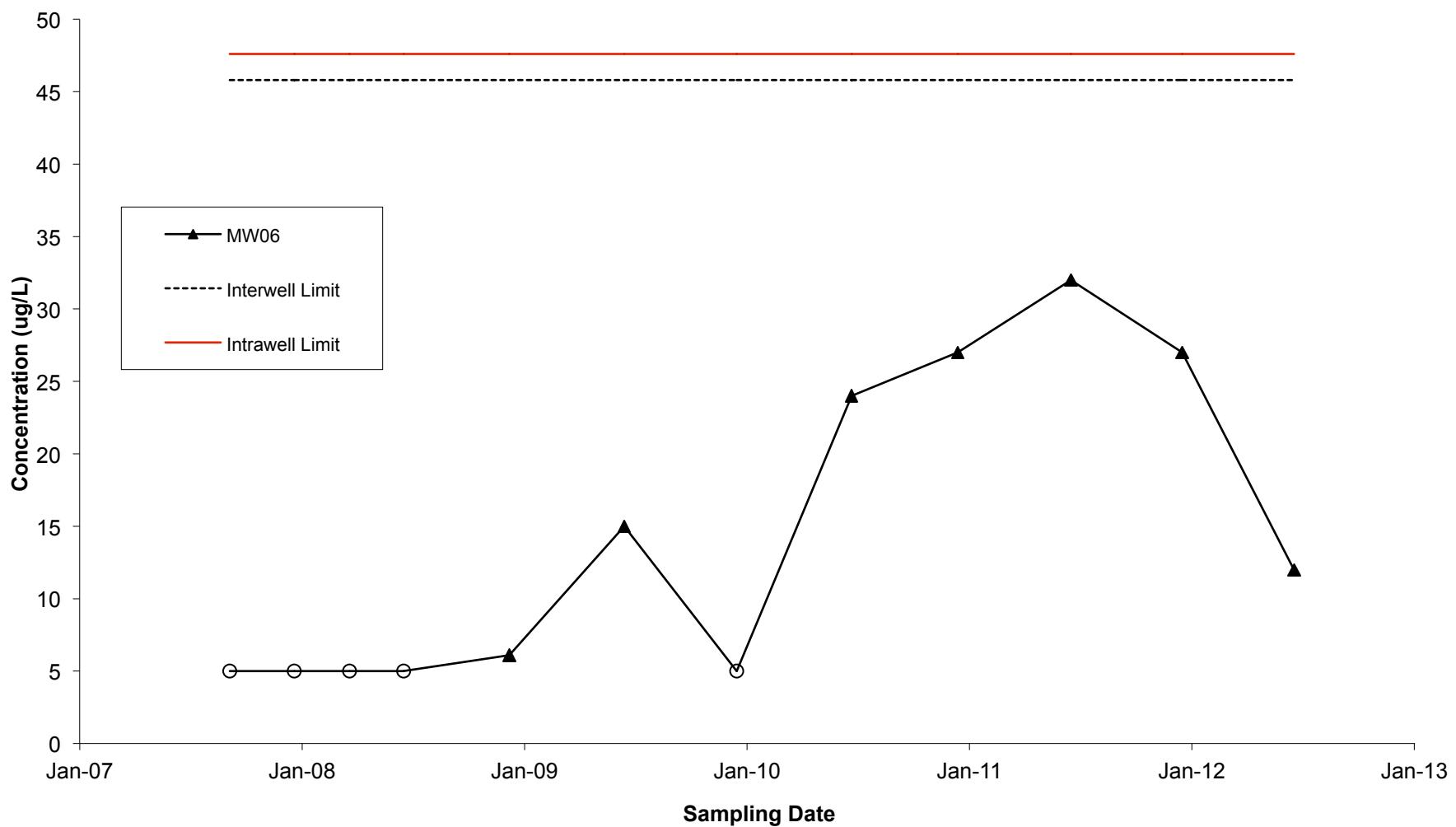
**cis-1,2-Dichloroethene in Well MW06**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



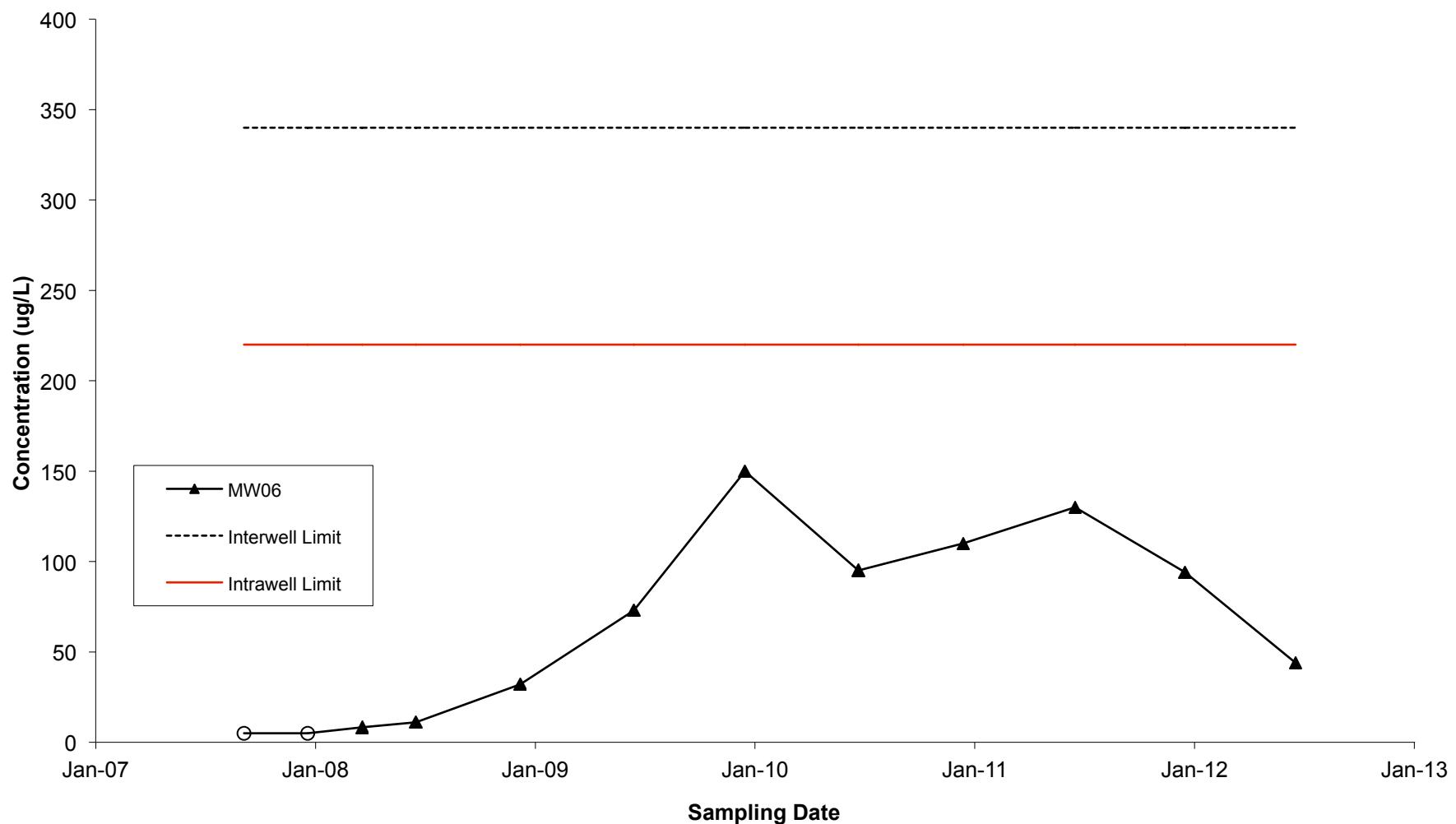
**Tetrachloroethene in Well MW06**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



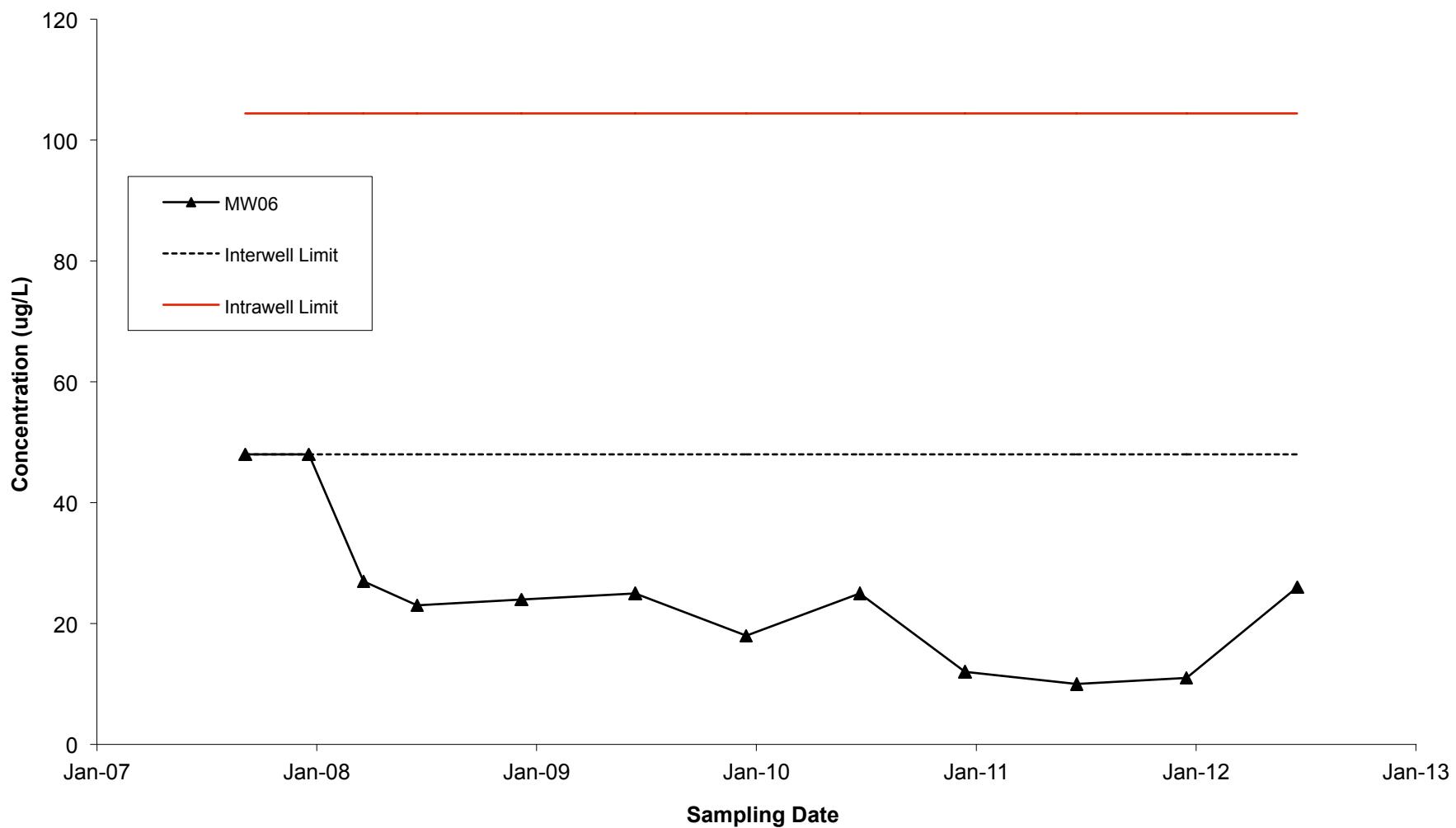
**Trichloroethene in Well MW06**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



**Vinyl Chloride in Well MW06**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Sep-07	ug/L	32
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Dec-07	ug/L	20
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Mar-08	ug/L	38
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Jun-08	ug/L	35
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Dec-08	ug/L	22
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Jun-09	ug/L	31
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Dec-09	ug/L	37
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Jun-10	ug/L	31
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Dec-10	ug/L	23
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	Jun-11	ug/L	26
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	12/20/11	ug/L	17
IPC/Roto-Rooter	MW06	190494	1,1,1-Trichloroethane	6/21/12	ug/L	15
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Sep-07	ug/L	9.8
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Dec-07	ug/L	14
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Jun-08	ug/L	5.0
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Dec-08	ug/L	6.8
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Dec-09	ug/L	6.7
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Jun-10	ug/L	5.9
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Dec-10	ug/L	6.8
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	Jun-11	ug/L	11
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	12/20/11	ug/L	7
IPC/Roto-Rooter	MW06	190504	1,1-Dichloroethane	6/21/12	ug/L	9.4
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Sep-07	ug/L	18
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Dec-07	ug/L	17
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Mar-08	ug/L	23
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Jun-08	ug/L	23
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Dec-08	ug/L	15
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Jun-09	ug/L	22
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Dec-09	ug/L	24
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Jun-10	ug/L	25
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Dec-10	ug/L	19
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	Jun-11	ug/L	19
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	12/20/11	ug/L	14
IPC/Roto-Rooter	MW06	190499	1,1-Dichloroethene	6/21/12	ug/L	11
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Sep-07	ug/L	200
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Dec-07	ug/L	230
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Mar-08	ug/L	250
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Jun-08	ug/L	250
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Dec-08	ug/L	200
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	210
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	190
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	180
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	110
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	91
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	77
IPC/Roto-Rooter	MW06	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	100
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Dec-07	ug/L	5.0
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Mar-08	ug/L	5.0
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Jun-08	ug/L	5.0

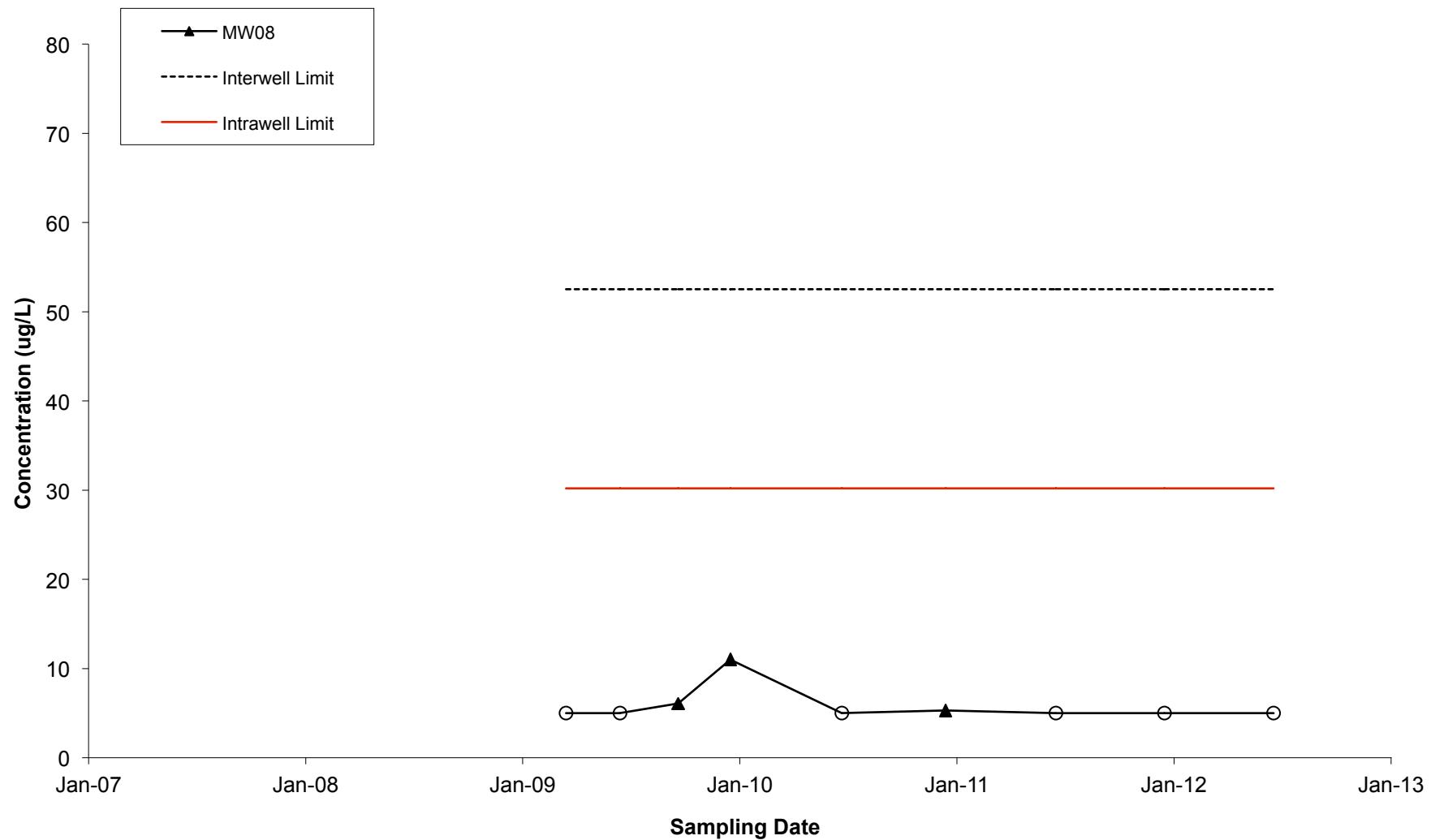
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Dec-08	ug/L	6.1
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Jun-09	ug/L	15
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Jun-10	ug/L	24
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Dec-10	ug/L	27
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	Jun-11	ug/L	32
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	12/20/11	ug/L	27
IPC/Roto-Rooter	MW06	190525	Tetrachloroethene	6/21/12	ug/L	12
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Sep-07	ug/L	5.0
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Dec-07	ug/L	5.0
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Mar-08	ug/L	8.3
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Jun-08	ug/L	11
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Dec-08	ug/L	32
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Jun-09	ug/L	73
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Dec-09	ug/L	150
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Jun-10	ug/L	95
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Dec-10	ug/L	110
IPC/Roto-Rooter	MW06	185820	Trichloroethene	Jun-11	ug/L	130
IPC/Roto-Rooter	MW06	185820	Trichloroethene	12/20/11	ug/L	94
IPC/Roto-Rooter	MW06	185820	Trichloroethene	6/21/12	ug/L	44
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Sep-07	ug/L	48
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Dec-07	ug/L	48
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Mar-08	ug/L	27
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Jun-08	ug/L	23
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Dec-08	ug/L	24
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Jun-09	ug/L	25
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Dec-09	ug/L	18
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Jun-10	ug/L	25
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Dec-10	ug/L	12
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	Jun-11	ug/L	10
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	12/20/11	ug/L	11
IPC/Roto-Rooter	MW06	185825	Vinyl Chloride	6/21/12	ug/L	26





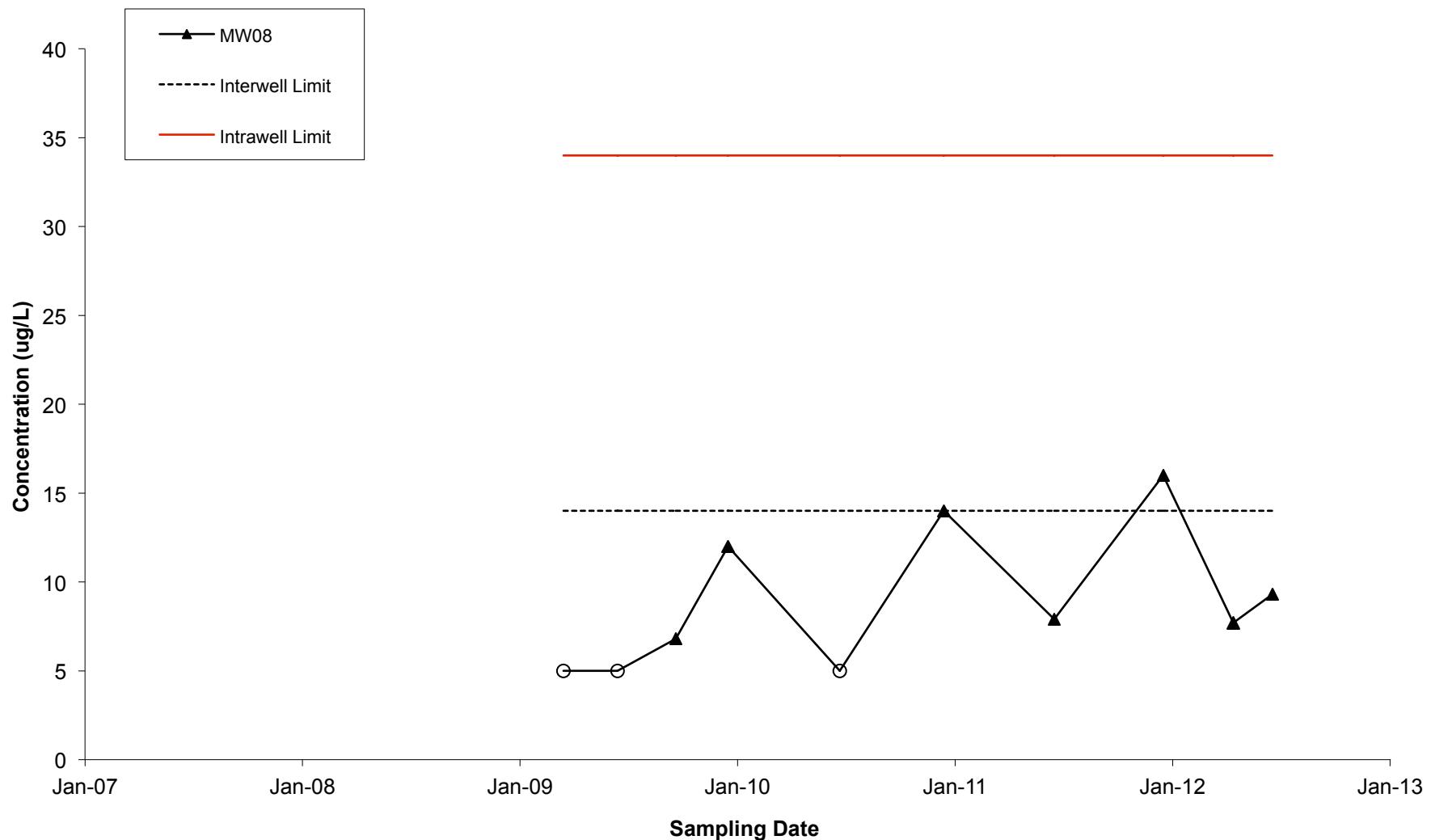
**1,1,1-Trichloroethane in Well MW08  
IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



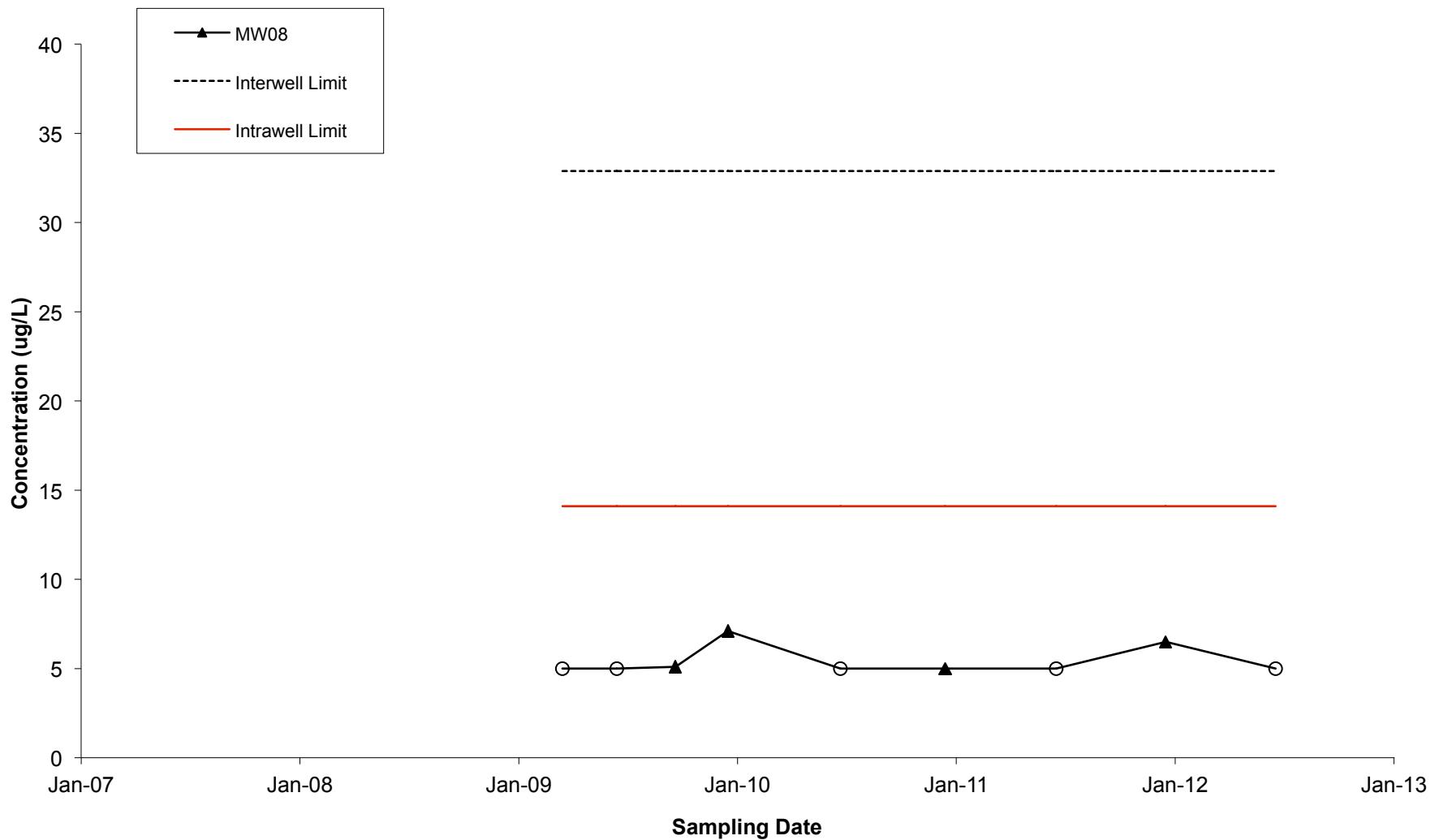
**1,1-Dichloroethane in Well MW08**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



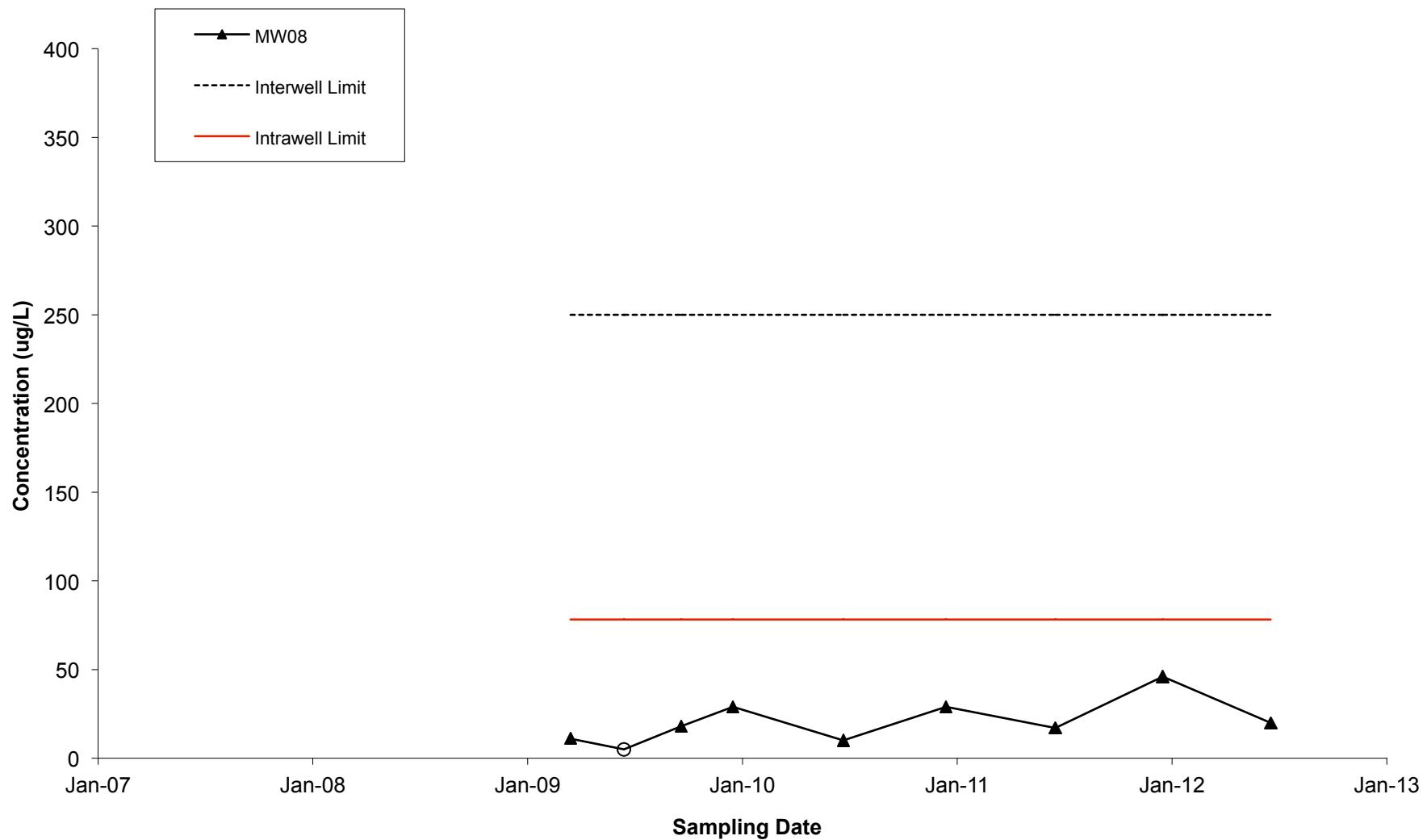
**1,1-Dichloroethene in Well MW08**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



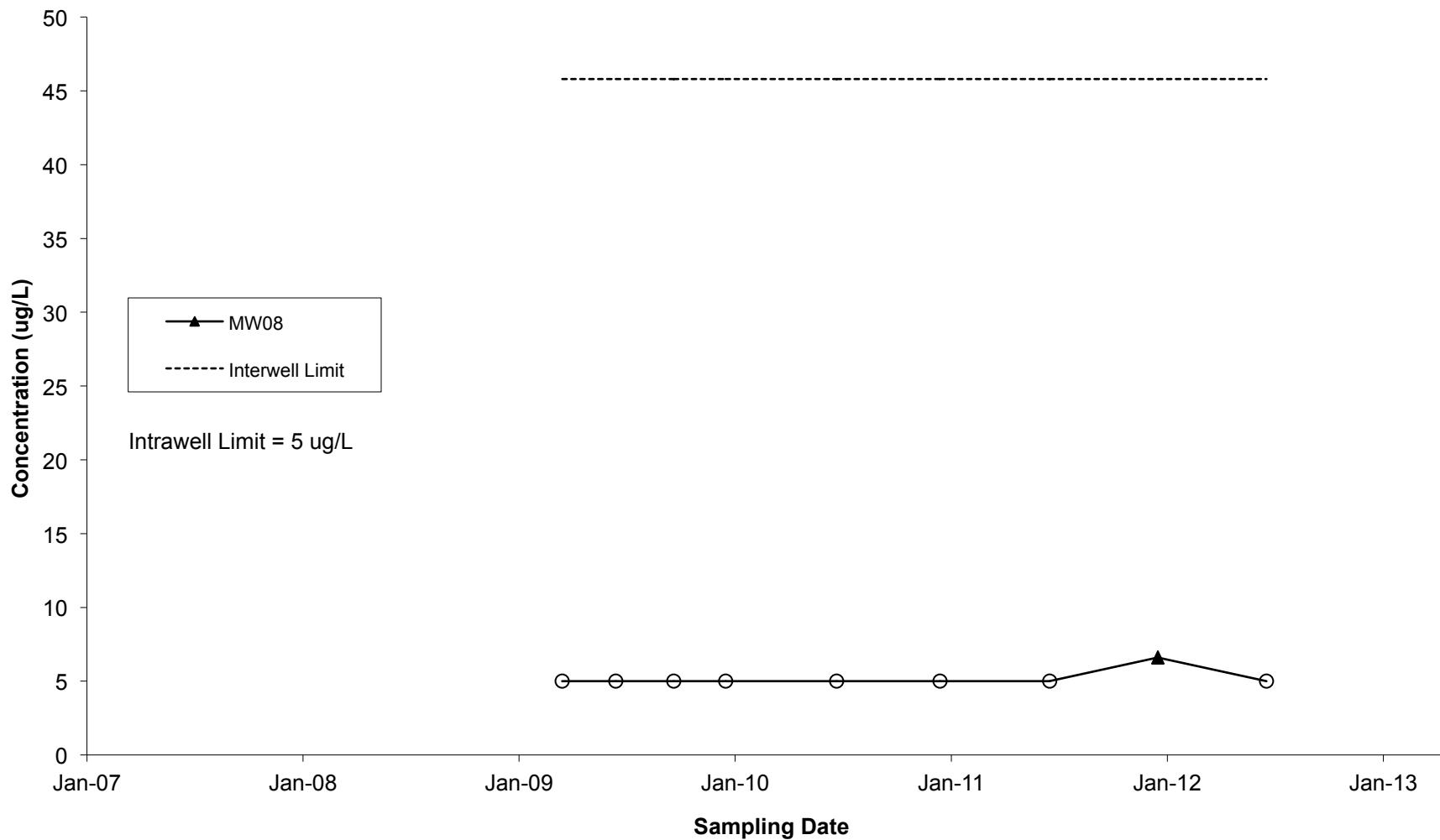
**cis-1,2-Dichloroethene in Well MW08**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



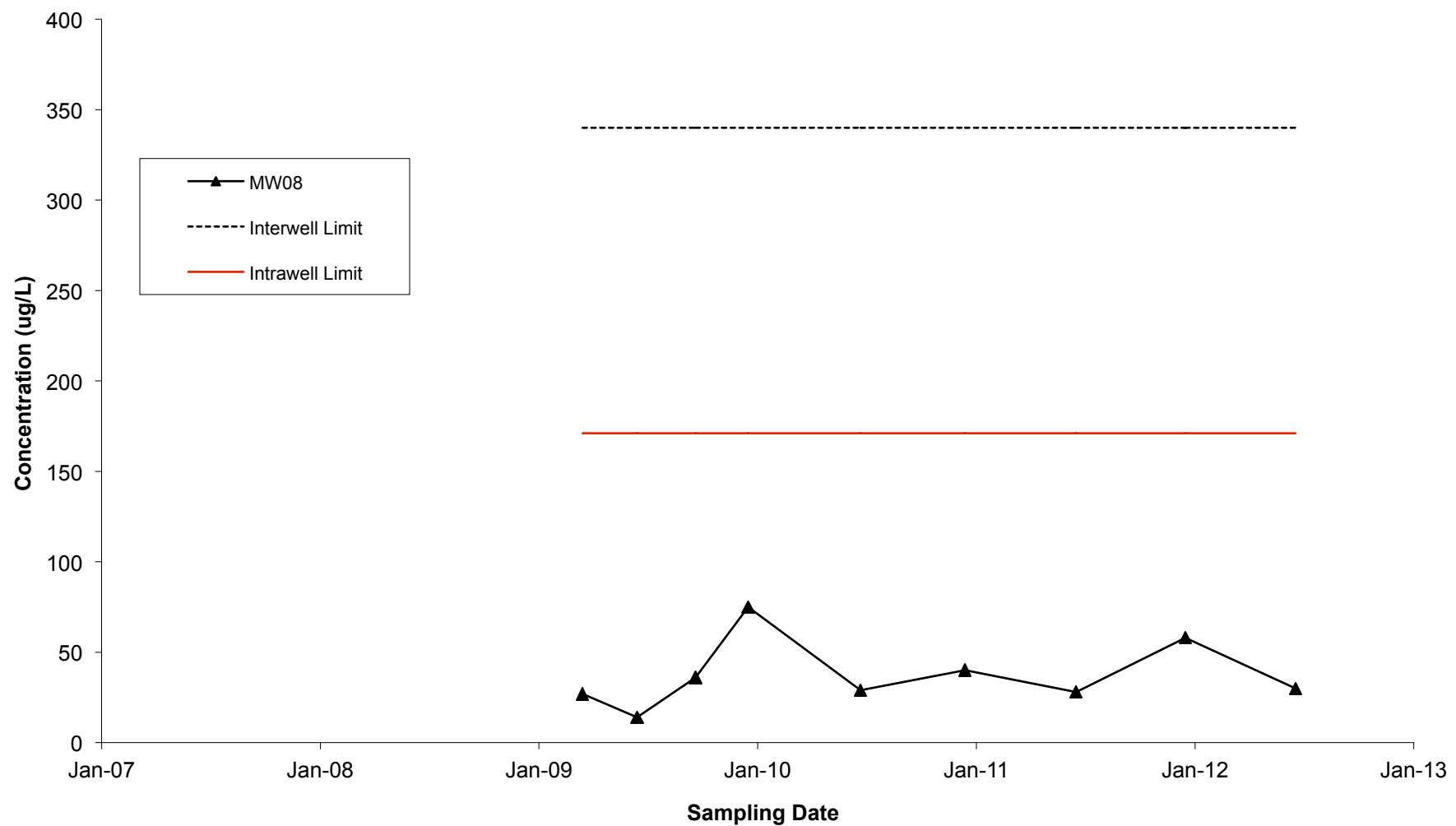
**Tetrachloroethene in Well MW08**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are marked  
with a clear circle.



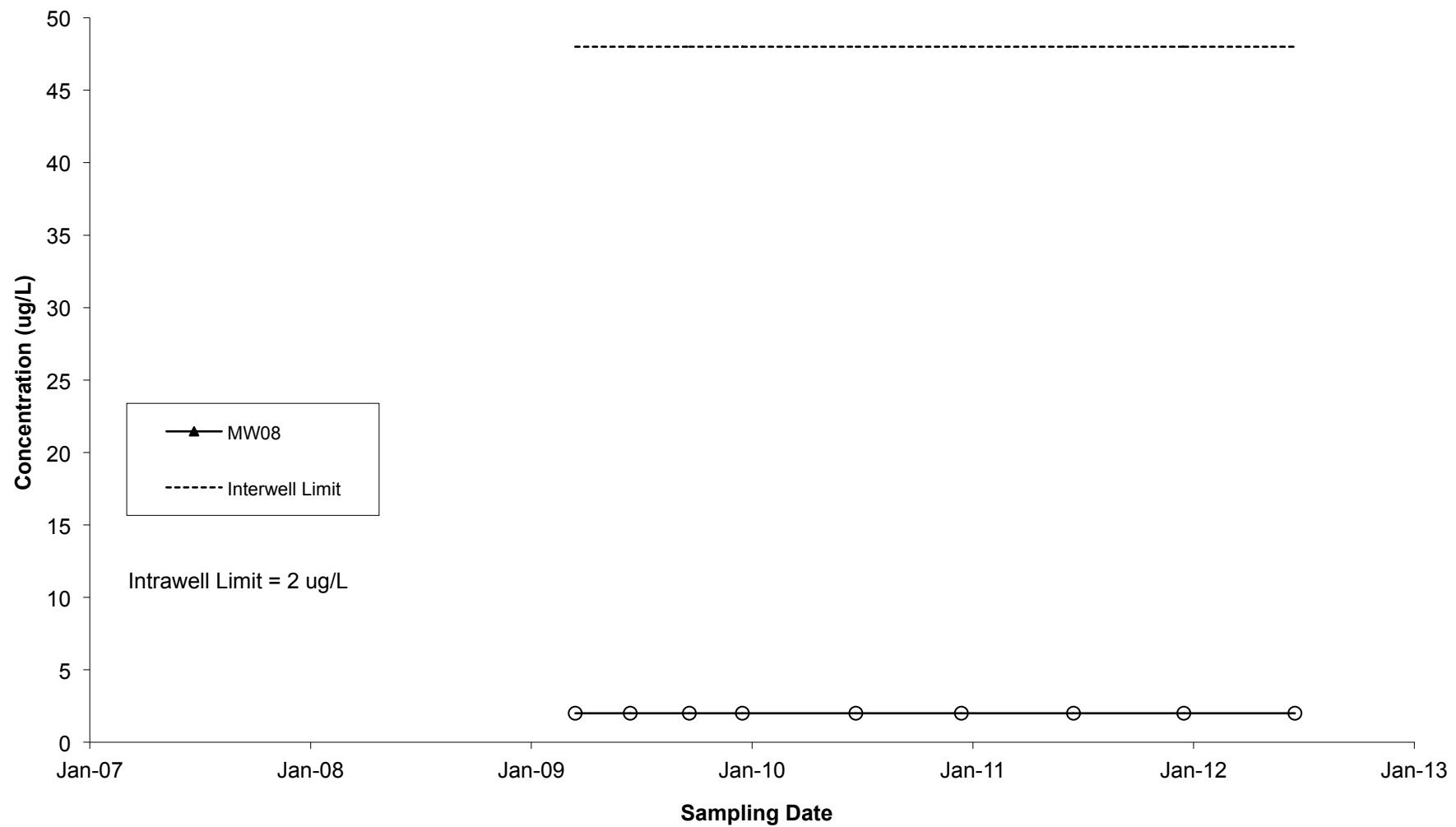
**Trichloroethene in Well MW08**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



**Vinyl Chloride in Well MW08**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Sep-09	ug/L	6.1
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Dec-09	ug/L	11
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Dec-10	ug/L	5.3
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	Jun-11	ug/L	5
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	12/20/11	ug/L	5
IPC/Roto-Rooter	MW08	190494	1,1,1-Trichloroethane	6/21/12	ug/L	5
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Sep-09	ug/L	6.8
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Dec-09	ug/L	12
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Dec-10	ug/L	14
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	Jun-11	ug/L	7.9
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	12/20/11	ug/L	16
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	4/16/12	ug/L	7.7
IPC/Roto-Rooter	MW08	190504	1,1-Dichloroethane	6/21/12	ug/L	9.3
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Sep-09	ug/L	5.1
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Dec-09	ug/L	7.1
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	12/20/11	ug/L	6.5
IPC/Roto-Rooter	MW08	190499	1,1-Dichloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Mar-09	ug/L	11
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Sep-09	ug/L	18
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	29
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	10
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	29
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	17
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	12/20/11	ug/L	46
IPC/Roto-Rooter	MW08	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	20
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	12/20/11	ug/L	6.6
IPC/Roto-Rooter	MW08	190525	Tetrachloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Mar-09	ug/L	27
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Jun-09	ug/L	14
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Sep-09	ug/L	36
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Dec-09	ug/L	75
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Jun-10	ug/L	29
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Dec-10	ug/L	40

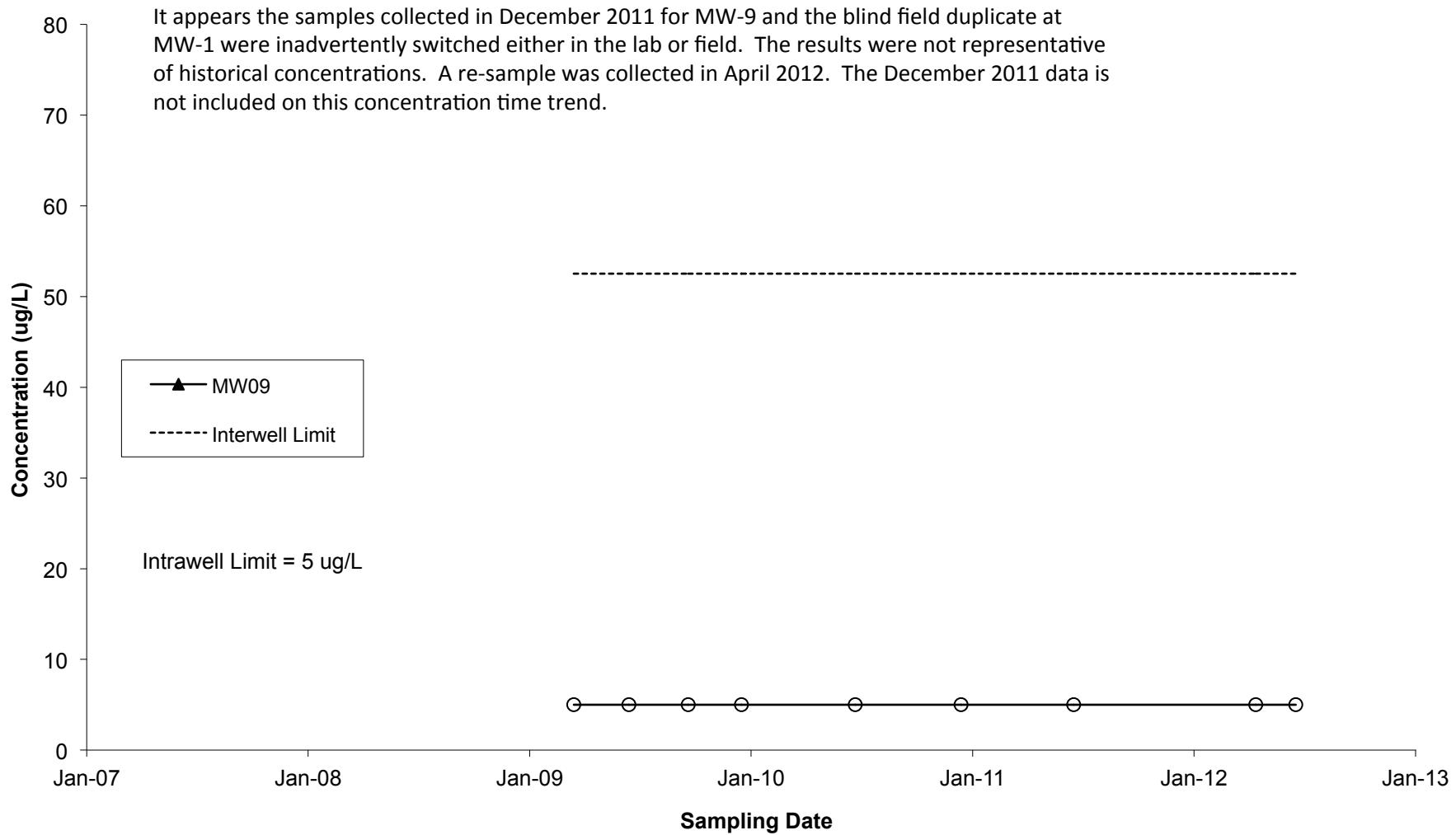
IPC/Roto-Rooter	MW08	185820	Trichloroethene	Jun-11	ug/L	28
IPC/Roto-Rooter	MW08	185820	Trichloroethene	12/20/11	ug/L	58
IPC/Roto-Rooter	MW08	185820	Trichloroethene	6/21/12	ug/L	30
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Mar-09	ug/L	2.0
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Jun-09	ug/L	2.0
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Sep-09	ug/L	2.0
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Dec-09	ug/L	2.0
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Jun-10	ug/L	2.0
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Dec-10	ug/L	2
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	Jun-11	ug/L	2
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	12/20/11	ug/L	2
IPC/Roto-Rooter	MW08	185825	Vinyl Chloride	6/21/12	ug/L	2





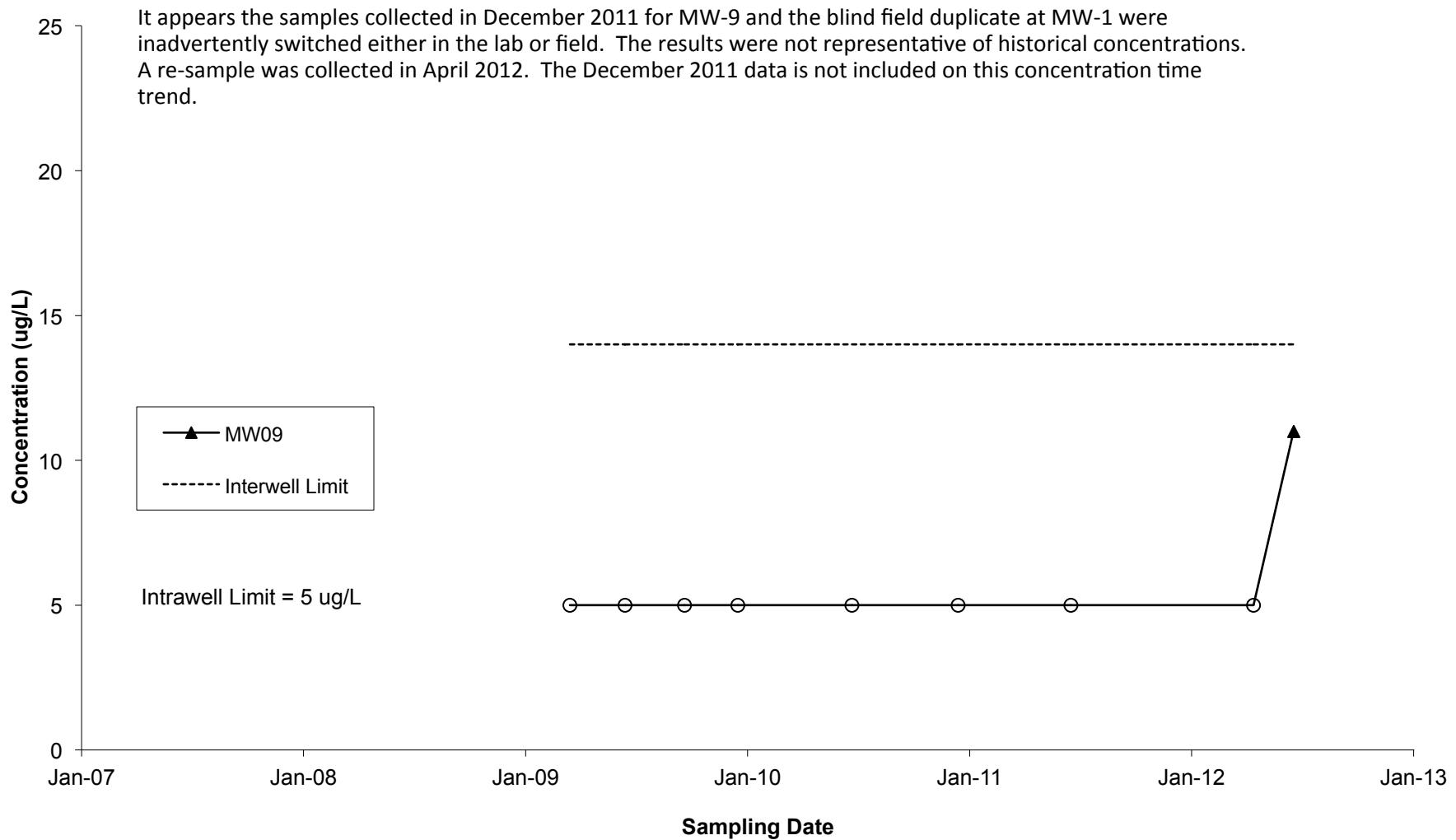
**1,1,1-Trichloroethane in Well MW09  
IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



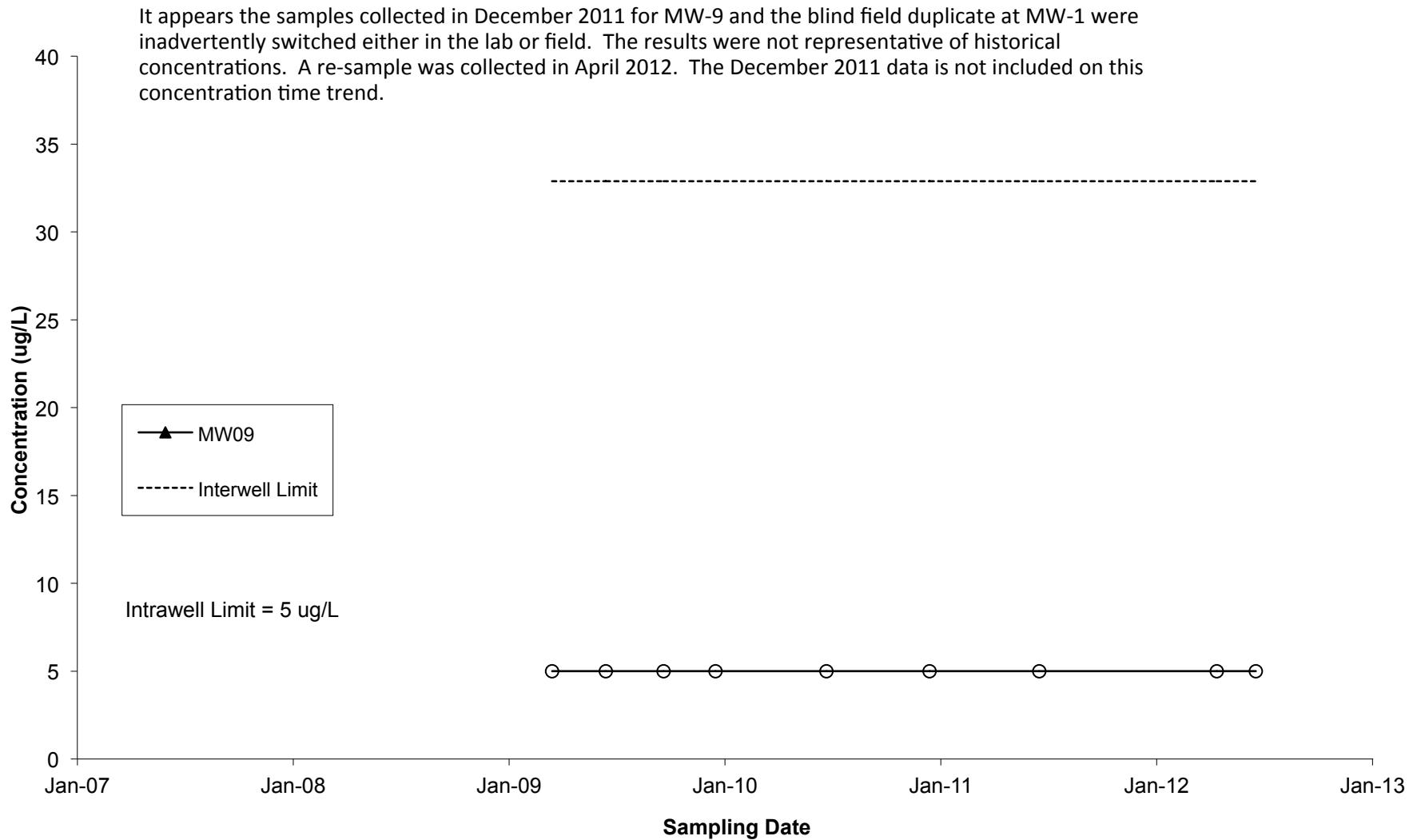
**1,1-Dichloroethane in Well MW09  
IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



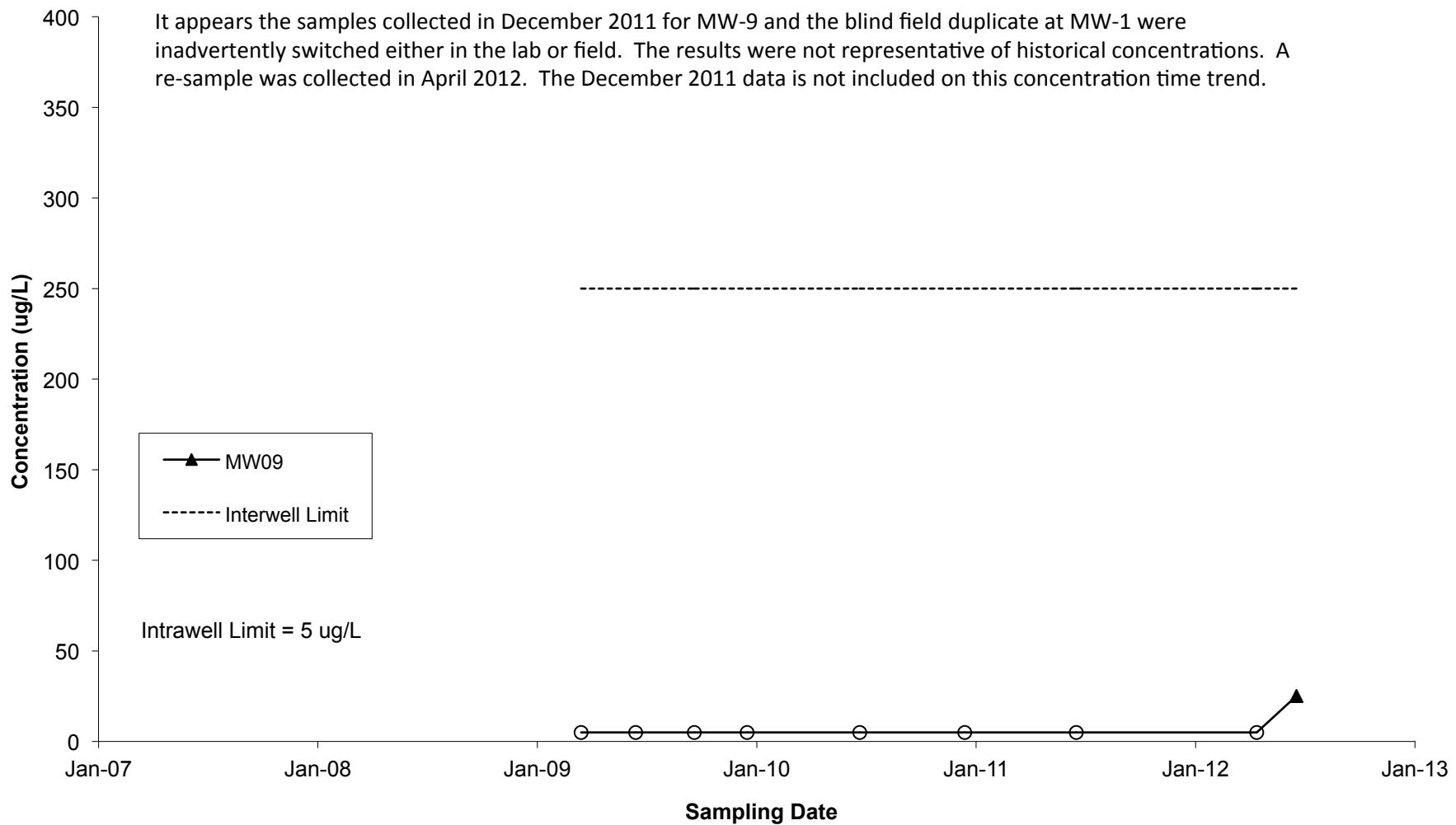
**1,1-Dichloroethene in Well MW09  
IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



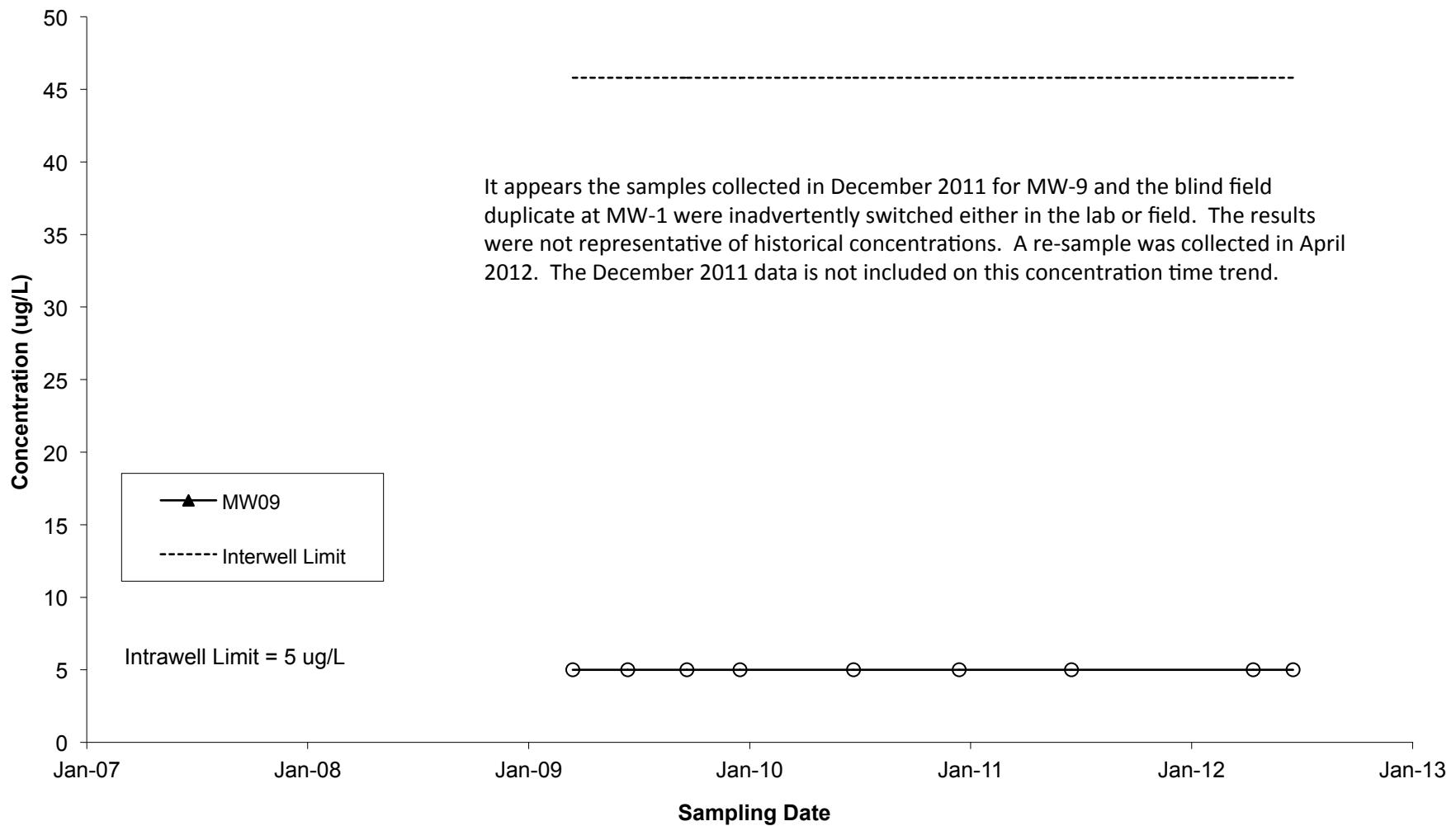
**cis-1,2-Dichloroethene in Well MW09  
IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



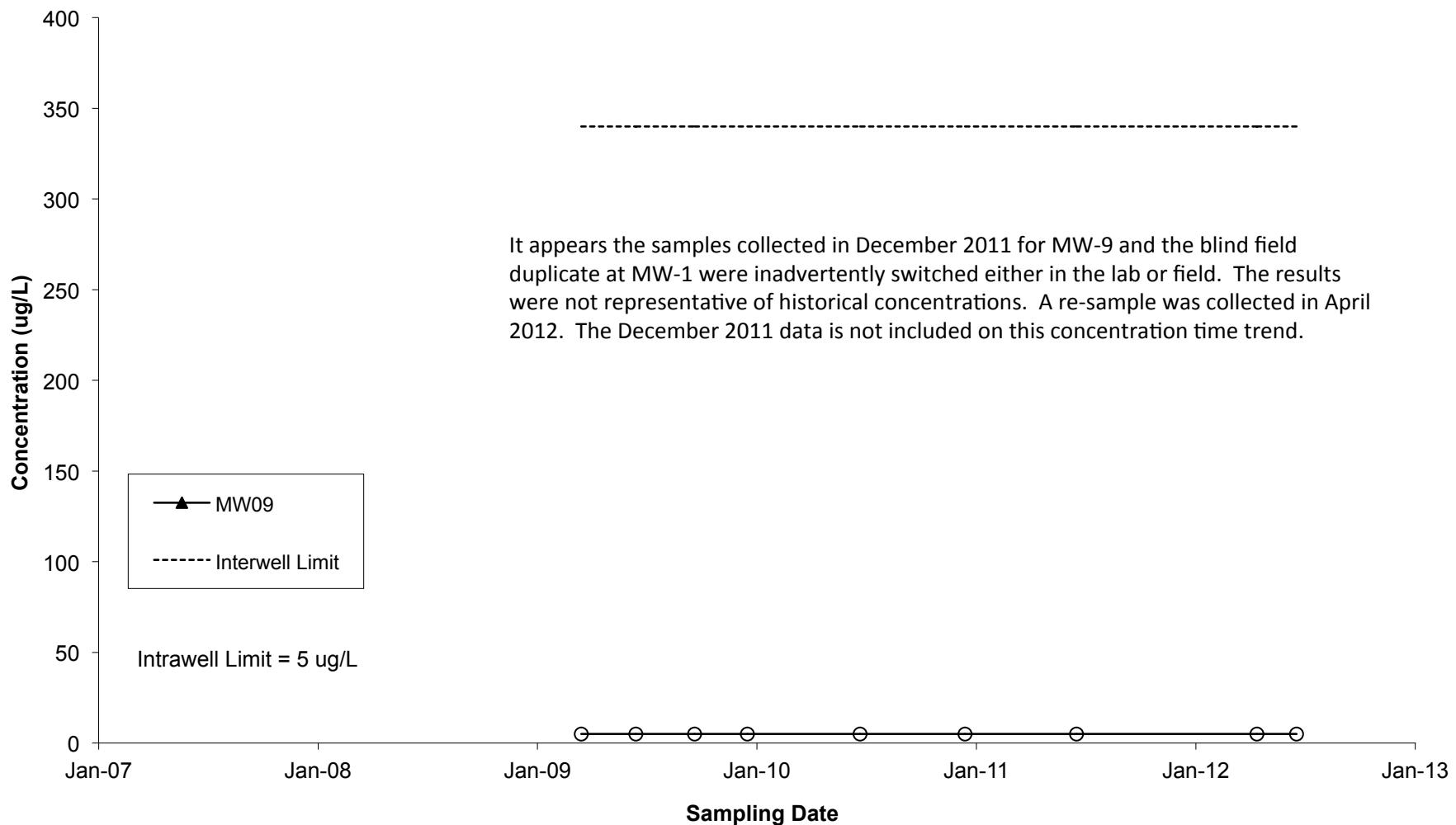
**Tetrachloroethene in Well MW09**  
**IPC/Roto-Rooter Landfill**

Note: Non-detects are  
marked with a clear circle.



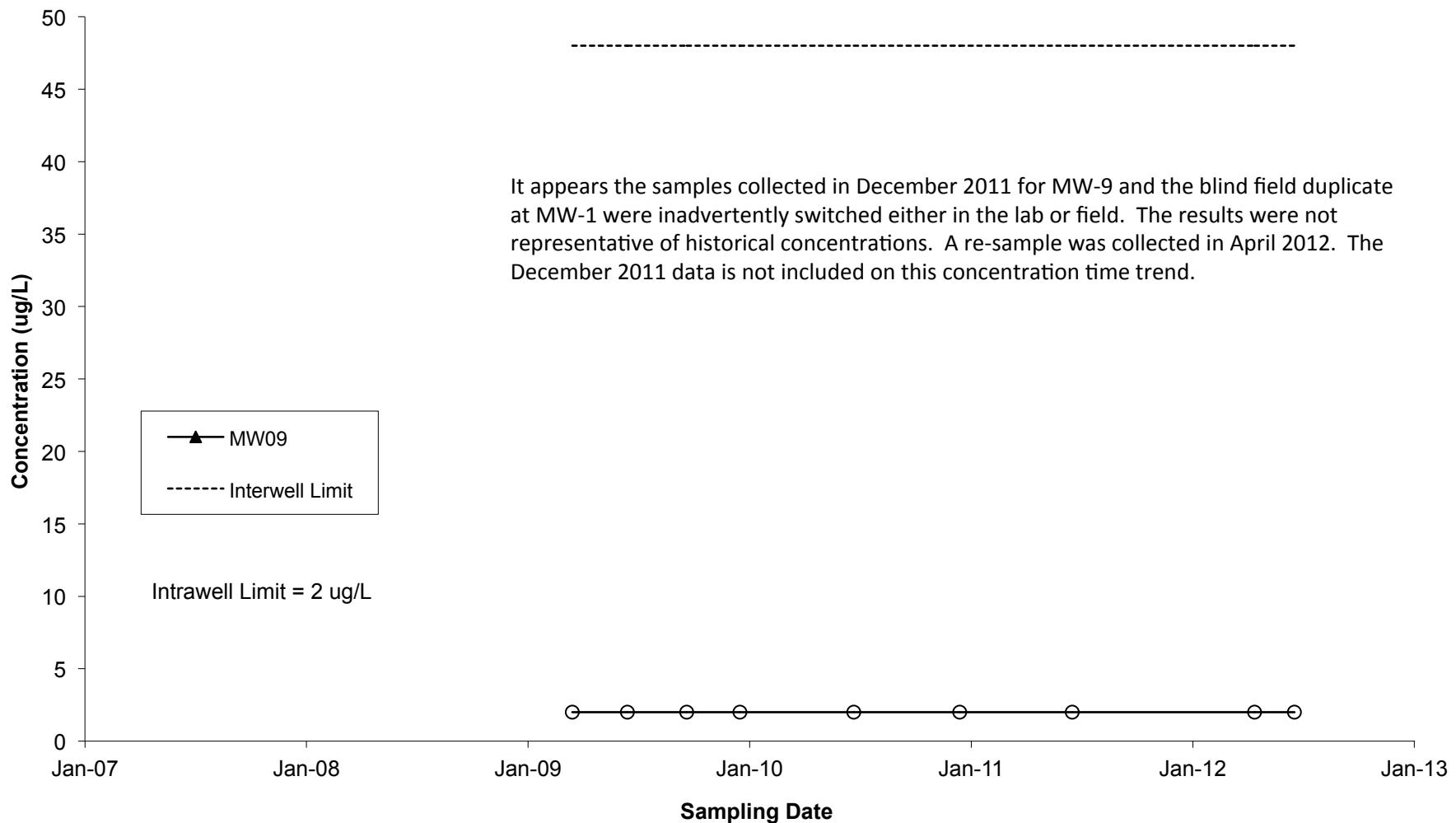
## **Trichloroethene in Well MW09 IPC/Roto-Rooter Landfill**

Note: Non-detects are marked with a clear circle.



## Vinyl Chloride in Well MW09 IPC/Roto-Rooter Landfill

Note: Non-detects are marked with a clear circle.



SiteName	WellName	ParameterID	ParameterName	SampleDate	Units	Result
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Dec-10	ug/L	5
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	Jun-11	ug/L	5
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	4/16/12	ug/L	5
IPC/Roto-Rooter	MW09	190494	1,1,1-Trichloroethane	6/21/12	ug/L	5
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Dec-10	ug/L	5
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	Jun-11	ug/L	5
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	4/16/12	ug/L	5
IPC/Roto-Rooter	MW09	190504	1,1-Dichloroethane	6/21/12	ug/L	11
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	4/16/12	ug/L	5
IPC/Roto-Rooter	MW09	190499	1,1-Dichloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	4/16/12	ug/L	5
IPC/Roto-Rooter	MW09	147907	cis-1,2-Dichloroethene	6/21/12	ug/L	25
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	Jun-11	ug/L	5
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	4/16/12	ug/L	5
IPC/Roto-Rooter	MW09	190525	Tetrachloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Mar-09	ug/L	5.0
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Jun-09	ug/L	5.0
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Sep-09	ug/L	5.0
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Dec-09	ug/L	5.0
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Jun-10	ug/L	5.0
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Dec-10	ug/L	5
IPC/Roto-Rooter	MW09	185820	Trichloroethene	Jun-11	ug/L	5

IPC/Roto-Rooter	MW09	185820	Trichloroethene	4/16/12	ug/L	5
IPC/Roto-Rooter	MW09	185820	Trichloroethene	6/21/12	ug/L	5
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Mar-09	ug/L	2.0
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Jun-09	ug/L	2.0
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Sep-09	ug/L	2.0
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Dec-09	ug/L	2.0
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Jun-10	ug/L	2.0
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Dec-10	ug/L	2
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	Jun-11	ug/L	2
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	4/16/12	ug/L	2
IPC/Roto-Rooter	MW09	185825	Vinyl Chloride	6/21/12	ug/L	2





## Data Validation Checklist

Date: 4/6/2012

Validator Name: Mary Pearson (EIL)

Facility: Interstate Pollution Control - Roto Rooter

Facility Location: Rockford, Illinois

Event: Dec-11

Laboratory: TestAmerica - Chicago

Sampling Dates: 12/20/2011

Laboratory Job No: 500-43406-1 (Analysis Batch Numbers 136978 and 137060)

	Yes	No	NA
Were the correct analytical methodologies used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The field information form indicates the blind field duplicate (MW7) was taken at well MW1. However, it appears the lab (or field) mistakenly switched MW7 (blind field duplicate at MW1) and MW9 (one of the river wells). Typically there are no detections observed at MW9; however, during the December 2011 sampling event, several VOCs were detected at MW9 and the reported concentrations look nearly identical to those in MW1. Furthermore, MW7 (which should be the blind field duplicate at MW1) had no detections except for a low level concentration of cis-1,2-dichloroethene. Re-samples will be collected in April 2012 to confirm if the December 2011 blind field duplicate (MW7) was inadvertently switched with MW9.

Note:

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) analyzed at well MW6. The MS/MSD recoveries were within the acceptance ranges for all compounds.

## Duplicate Sample Evaluation

December 2011

IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW1	Qualifier	MW7 *	(Blind Field Duplicate)	Qualifier	RPD
1,1,1-Trichloroethane	12/20/2011	ug/L	5.2		5		U	3.9%
1,1,2,2-Tetrachloroethane	12/20/2011	ug/L	5	U	5		U	0%
1,1,2-Trichloroethane	12/20/2011	ug/L	5	U	5		U	0%
1,1-Dichloroethane	12/20/2011	ug/L	12		5		U	82%
1,1-Dichloroethene	12/20/2011	ug/L	13		5		U	89%
1,2-Dichloroethane	12/20/2011	ug/L	5	U	5		U	0%
1,2-Dichloropropane	12/20/2011	ug/L	5	U	5		U	0%
2-Hexanone	12/20/2011	ug/L	20	U	20		U	0%
Acetone	12/20/2011	ug/L	20	U	20		U	0%
Benzene	12/20/2011	ug/L	5	U	5		U	0%
Bromodichloromethane	12/20/2011	ug/L	5	U	5		U	0%
Bromoform	12/20/2011	ug/L	5	U	5		U	0%
Bromomethane	12/20/2011	ug/L	5	U	5		U	0%
Carbon disulfide	12/20/2011	ug/L	5	U	5		U	0%
Carbon tetrachloride	12/20/2011	ug/L	5	U	5		U	0%
Chlorobenzene	12/20/2011	ug/L	5	U	5		U	0%
Chloroethane	12/20/2011	ug/L	5	U	5		U	0%
Chloroform	12/20/2011	ug/L	5	U	5		U	0%
Chloromethane	12/20/2011	ug/L	5	U	5		U	0%
cis-1,2-Dichloroethene	12/20/2011	ug/L	140		6.5			182%
cis-1,3-Dichloropropene	12/20/2011	ug/L	5	U	5		U	0%
Dibromochloromethane	12/20/2011	ug/L	5	U	5		U	0%
Ethylbenzene	12/20/2011	ug/L	5	U	5		U	0%
Methyl Ethyl Ketone	12/20/2011	ug/L	20	U	20		U	0%
Methyl Isobutyl Ketone	12/20/2011	ug/L	20	U	20		U	0%
Methylene Chloride	12/20/2011	ug/L	10	U	10		U	0%
Styrene	12/20/2011	ug/L	5	U	5		U	0%
Tetrachloroethene	12/20/2011	ug/L	5	U	5		U	0%
Toluene	12/20/2011	ug/L	5	U	5		U	0%
trans-1,2-Dichloroethene	12/20/2011	ug/L	5	U	5		U	0%
trans-1,3-Dichloropropene	12/20/2011	ug/L	5	U	5		U	0%
Trichloroethene	12/20/2011	ug/L	21		5		U	123%
Vinyl chloride	12/20/2011	ug/L	15		2		U	153%
Xylenes, Total	12/20/2011	ug/L	5	U	5		U	0%

Qualifier U - Not Detected

Chemicals of Concern are highlighted in gray.

According to the field forms, the blind field duplicate sample (MW7) was collected from well MW1.

\* The field information form indicates the blind field duplicate (MW7) was taken at well MW1. However, it appears the lab (or field) mistakenly switched MW7 (blind field duplicate at MW1) and MW9 (one of the river wells).

Typically there are no detections observed at MW9; however, during the December 2011 sampling event, several VOCs were detected at MW9 and the reported concentrations look nearly identical to those in MW1. Furthermore, MW7 (which should be the blind field duplicate at MW1) had no detections except for a low level concentration of cis-1,2-dichloroethene. Re-samples will be collected in April 2012 to confirm if the December 2011 blind field duplicate (MW7) was inadvertently switched with MW9.

## Duplicate Sample Evaluation

December 2011

IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW1	Qualifier	MW9 *	(Blind Field Duplicate)	Qualifier	RPD
1,1,1-Trichloroethane	12/20/2011	ug/L	5.2		5		U	3.9%
1,1,2,2-Tetrachloroethane	12/20/2011	ug/L	5	U	5		U	0%
1,1,2-Trichloroethane	12/20/2011	ug/L	5	U	5		U	0%
1,1-Dichloroethane	12/20/2011	ug/L	12		11			8.7%
1,1-Dichloroethene	12/20/2011	ug/L	13		12			8%
1,2-Dichloroethane	12/20/2011	ug/L	5	U	5		U	0%
1,2-Dichloropropane	12/20/2011	ug/L	5	U	5		U	0%
2-Hexanone	12/20/2011	ug/L	20	U	20		U	0%
Acetone	12/20/2011	ug/L	20	U	20		U	0%
Benzene	12/20/2011	ug/L	5	U	5		U	0%
Bromodichloromethane	12/20/2011	ug/L	5	U	5		U	0%
Bromoform	12/20/2011	ug/L	5	U	5		U	0%
Bromomethane	12/20/2011	ug/L	5	U	5		U	0%
Carbon disulfide	12/20/2011	ug/L	5	U	5		U	0%
Carbon tetrachloride	12/20/2011	ug/L	5	U	5		U	0%
Chlorobenzene	12/20/2011	ug/L	5	U	5		U	0%
Chloroethane	12/20/2011	ug/L	5	U	5		U	0%
Chloroform	12/20/2011	ug/L	5	U	5		U	0%
Chloromethane	12/20/2011	ug/L	5	U	5		U	0%
cis-1,2-Dichloroethene	12/20/2011	ug/L	140		120			15%
cis-1,3-Dichloropropene	12/20/2011	ug/L	5	U	5		U	0%
Dibromochloromethane	12/20/2011	ug/L	5	U	5		U	0%
Ethylbenzene	12/20/2011	ug/L	5	U	5		U	0%
Methyl Ethyl Ketone	12/20/2011	ug/L	20	U	20		U	0%
Methyl Isobutyl Ketone	12/20/2011	ug/L	20	U	20		U	0%
Methylene Chloride	12/20/2011	ug/L	10	U	10		U	0%
Styrene	12/20/2011	ug/L	5	U	5		U	0%
Tetrachloroethene	12/20/2011	ug/L	5	U	5		U	0%
Toluene	12/20/2011	ug/L	5	U	5		U	0%
trans-1,2-Dichloroethene	12/20/2011	ug/L	5	U	5		U	0%
trans-1,3-Dichloropropene	12/20/2011	ug/L	5	U	5		U	0%
Trichloroethene	12/20/2011	ug/L	21		20			4.9%
Vinyl chloride	12/20/2011	ug/L	15		14			6.9%
Xylenes, Total	12/20/2011	ug/L	5	U	5		U	0%

Qualifier U - Not Detected

Chemicals of Concern are highlighted in gray.

According to the field forms, the blind field duplicate sample (MW7) was collected from well MW1.

\* The field information form indicates the blind field duplicate (MW7) was taken at well MW1. However, it appears the lab (or field) mistakenly switched MW7 (blind field duplicate at MW1) and MW9 (one of the river wells).

Typically there are no detections observed at MW9; however, during the December 2011 sampling event, several VOCs were detected at MW9 and the reported concentrations look nearly identical to those in MW1. Furthermore, MW7 (which should be the blind field duplicate at MW1) had no detections except for a low level concentration of cis-1,2-dichloroethene. Re-samples will be collected in April 2012 to confirm if the December 2011 blind field duplicate (MW7) was inadvertently switched with MW9.

## Data Validation Checklist

Date: 5/18/2012

Validator Name: Mary Pearson (EIL)

Facility: Interstate Pollution Control - Roto Rooter

Facility Location: Rockford, Illinois

Event: Apr-12

Laboratory: TestAmerica - Chicago

Sampling Dates: 4/16/2012

Laboratory Job No: 500-45507-1 (Analysis Batch Number 147689)

	Yes	No	NA
Were the correct analytical methodologies used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Blind field duplicate (MW7) was collected at MW9. No VOCs detected in either sample.

## Duplicate Sample Evaluation

April 2012

IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW9	Qualifier	Blind Field Duplicate	Qualifier	RPD
1,1,1-Trichloroethane	4/16/2012	ug/L	5	U	5	U	0%
1,1,2,2-Tetrachloroethane	4/16/2012	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	4/16/2012	ug/L	5	U	5	U	0%
1,1-Dichloroethane	4/16/2012	ug/L	5	U	5	U	0%
1,1-Dichloroethene	4/16/2012	ug/L	5	U	5	U	0%
1,2-Dichloroethane	4/16/2012	ug/L	5	U	5	U	0%
1,2-Dichloropropane	4/16/2012	ug/L	5	U	5	U	0%
2-Hexanone	4/16/2012	ug/L	20	U	20	U	0%
Acetone	4/16/2012	ug/L	20	U	20	U	0%
Benzene	4/16/2012	ug/L	5	U	5	U	0%
Bromodichloromethane	4/16/2012	ug/L	5	U	5	U	0%
Bromoform	4/16/2012	ug/L	5	U	5	U	0%
Bromomethane	4/16/2012	ug/L	5	U	5	U	0%
Carbon disulfide	4/16/2012	ug/L	5	U	5	U	0%
Carbon tetrachloride	4/16/2012	ug/L	5	U	5	U	0%
Chlorobenzene	4/16/2012	ug/L	5	U	5	U	0%
Chloroethane	4/16/2012	ug/L	5	U	5	U	0%
Chloroform	4/16/2012	ug/L	5	U	5	U	0%
Chloromethane	4/16/2012	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	4/16/2012	ug/L	5	U	5	U	0%
cis-1,3-Dichloropropene	4/16/2012	ug/L	5	U	5	U	0%
Dibromochloromethane	4/16/2012	ug/L	5	U	5	U	0%
Ethylbenzene	4/16/2012	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	4/16/2012	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	4/16/2012	ug/L	20	U	20	U	0%
Methylene Chloride	4/16/2012	ug/L	10	U	10	U	0%
Styrene	4/16/2012	ug/L	5	U	5	U	0%
Tetrachloroethene	4/16/2012	ug/L	5	U	5	U	0%
Toluene	4/16/2012	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	4/16/2012	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	4/16/2012	ug/L	5	U	5	U	0%
Trichloroethene	4/16/2012	ug/L	5	U	5	U	0%
Vinyl chloride	4/16/2012	ug/L	2	U	2	U	0%
Xylenes, Total	4/16/2012	ug/L	5	U	5	U	0%

Qualifier U - Not Detected

Chemicals of Concern are highlighted in gray.

The blind field duplicate (MW7) was taken at well MW9.

## Data Validation Checklist

Date: 7/31/2012

Validator Name: Mary Pearson (EIL)

Facility: Interstate Pollution Control - Roto Rooter

Facility Location: Rockford, Illinois

Event: Jun-12

Laboratory: TestAmerica - Chicago

Sampling Dates: 6/21/2012

Laboratory Job No: 500-47604-1 (Analysis Batch Numbers 154471 and 154568)

	Yes	No	NA
Were the correct analytical methodologies used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples analyzed within the VOC hold time (14 days)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated laboratory blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated trip blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were contaminants detected in the associated field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were surrogate recoveries within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were laboratory control spikes within the appropriate control ranges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were field duplicate samples within 20% relative percent difference of the primary samples for all tested analytes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Blind field duplicate (MW7) was collected at MW1.

Note:

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) analyzed at well MW6. The MS/MSD recoveries were within the acceptance ranges except for chloromethane in the MSD. Chloromethane was detected above the acceptance limits in the MSD; however, the recoveries of chloromethane in the associated MS and LCS were acceptable.

## Duplicate Sample Evaluation

June 2012

IPC Roto-Rooter Site

Parameter	Sample Date	Units	MW1	Qualifier	Blind Field Duplicate	Qualifier	RPD
1,1,1-Trichloroethane	6/21/2012	ug/L	5.9		5.8		1.7%
1,1,2,2-Tetrachloroethane	6/21/2012	ug/L	5	U	5	U	0%
1,1,2-Trichloroethane	6/21/2012	ug/L	5	U	5	U	0%
1,1-Dichloroethane	6/21/2012	ug/L	14		13		7.4%
1,1-Dichloroethene	6/21/2012	ug/L	15		15		0%
1,2-Dichloroethane	6/21/2012	ug/L	5	U	5	U	0%
1,2-Dichloropropane	6/21/2012	ug/L	5	U	5	U	0%
2-Hexanone	6/21/2012	ug/L	20	U	20	U	0%
Acetone	6/21/2012	ug/L	20	U	20	U	0%
Benzene	6/21/2012	ug/L	5	U	5	U	0%
Bromodichloromethane	6/21/2012	ug/L	5	U	5	U	0%
Bromoform	6/21/2012	ug/L	5	U	5	U	0%
Bromomethane	6/21/2012	ug/L	5	U	5	U	0%
Carbon disulfide	6/21/2012	ug/L	5	U	5	U	0%
Carbon tetrachloride	6/21/2012	ug/L	5	U	5	U	0%
Chlorobenzene	6/21/2012	ug/L	5	U	5	U	0%
Chloroethane	6/21/2012	ug/L	5	U	5	U	0%
Chloroform	6/21/2012	ug/L	5	U	5	U	0%
Chloromethane	6/21/2012	ug/L	5	U	5	U	0%
cis-1,2-Dichloroethene	6/21/2012	ug/L	160		150		6.4%
cis-1,3-Dichloropropene	6/21/2012	ug/L	5	U	5	U	0%
Dibromochloromethane	6/21/2012	ug/L	5	U	5	U	0%
Ethylbenzene	6/21/2012	ug/L	5	U	5	U	0%
Methyl Ethyl Ketone	6/21/2012	ug/L	20	U	20	U	0%
Methyl Isobutyl Ketone	6/21/2012	ug/L	20	U	20	U	0%
Methylene Chloride	6/21/2012	ug/L	10	U	10	U	0%
Styrene	6/21/2012	ug/L	5	U	5	U	0%
Tetrachloroethene	6/21/2012	ug/L	5	U	5	U	0%
Toluene	6/21/2012	ug/L	5	U	5	U	0%
trans-1,2-Dichloroethene	6/21/2012	ug/L	5	U	5	U	0%
trans-1,3-Dichloropropene	6/21/2012	ug/L	5	U	5	U	0%
Trichloroethene	6/21/2012	ug/L	17		18		5.7%
Vinyl chloride	6/21/2012	ug/L	16		15		6.4%
Xylenes, Total	6/21/2012	ug/L	5	U	5	U	0%

Qualifier U - Not Detected

Chemicals of Concern are highlighted in gray.

The blind field duplicate (MW7) was taken at well MW1.

